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History of The British Railways During The War 1939-1945

By R. BELL, C.B.E.

with a foreword by Sir WILLIAM V. WOOD,
President, London Midland & Scottish Railway

This book describes the great war accomplishment of the railways for the nation and for world freedom. Mr. Robert Bell, C.B.E., was Assistant General Manager of the London & North Eastern Railway Company. After his retirement in May, 1943, he was invited by the railway companies to write this history, and all who are interested in the work of the railways in these memorable years will be indebted to him for this volume.

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Another Steel Output Record

FOR the fourth successive month this year the April output of steel was a record. Production was at the annual rate of 15,283,000 tons, which compares with 15,117,000 tons in March, and with only 12,294,000 tons in April last year, when output was affected by the fuel crisis. The average rate of production over the first four months of this year is now no less than 15,016,000 tons, which compares with the target of 14,000,000 tons for 1948 laid down by the Government. Pig-iron production also showed a further improvement in April, and reached an annual rate of 9,433,000 tons, compared with 9,303,000 tons in March, and with only 7,238,000 tons a year ago. This improved output is a reflection of the benefit being secured from new blast furnaces, two of which recently have established European output records. The high level of steel production has been made possible by the continued success of the home scrap drive. The record rate of home scrap collection has checked the fall in stocks of scrap and pig iron.

Railway Catering Wages Dispute

Railway restaurant-car attendants and other employees in the catering grades of British Railways have rejected wages clauses in a new national agreement which has been proposed as a result of the coming into force of the Catering Wages Act on March 1. Briefly, we understand that the position is that wages generally were increased to conform with the rates laid down in that Act, and the service charge on dining cars, the proceeds of which previously had been shared among the staff, was abolished. This service charge has been replaced by a surcharge, the proceeds of which are retained by the railways as offset to the cost of the higher wages. The men are claiming that under the new arrangement they are worse off than they were previously. This claim is based on the fact that the addition to their pay, approximately £1 a week, is less than their share of the service charge *plus* tips from customers which, it is suggested, have tended to fall since the introduction of the surcharge, notwithstanding that notices in restaurant cars point out that the practice of adding a service charge in lieu of gratuities has been discontinued.

South African Railways Overseas Mission

An article in our April 16 issue discussed the report of the overseas mission arranged by the South African Railways in 1946. We commented somewhat pointedly on the finding of the mission that "very little is done by the railways visited overseas with regard to any specialised scheme of training members of their staff for the higher administrative positions." Mr. du Plessis, Chairman of the South African deputation, writes to explain (see page 566) that the sentence quoted above held good of *all* the railways visited, but was not intended to apply specifically to the British railways. The mission did appreciate the full purport of the traffic apprenticeship schemes in operation in this country. Mr. du Plessis is anxious to remove any impression that his party had reached a conclusion that was unfair to the former main-line companies, and it gives us pleasure to give publicity to his communication. As indicated in our article, we consider that the mission carried out a world-wide inquiry with great thoroughness, and submitted a most useful report to the General Manager of the South African Railways.

British Transport Commission Statistics

Before the war the Ministry of Transport issued monthly statistics* relating to railway traffic and operating results. Security precluded the publication of much of this information during the war but the British Transport Commission has now decided to resume publication of four-weekly statistics relating to railways, and to include information as to other forms of transport as it becomes available. It is not intended to give exhaustive statements of all the operations of the Commission or an analysis of the financial results. Sir Cyril Hurcomb,

* "Transport Statistics," 1948 series, No. 1 period to January 25. Price 1s.

Chairman of the Commission, in introducing the statistics says that these, together with additional statistical information, will be published in due course in the annual report. The present publication relates to the four weeks ended January 25, but it is hoped that it will soon be practicable to make the figures available within the month after the period with which they deal. The statistics given are grouped under revenue, manpower, equipment, and operation and are sub-divided according to the Executives and their regions or areas. We hope to deal further with these statistics in a later issue.

Distribution of Uruguay Railways Sale Proceeds

The panel set up to consider the distribution of proceeds from the sale of the British-owned railways in Uruguay among the stockholders made its proposals known last Friday. As recorded in our March 12 issue, the properties of the five railways and the Quarahim International Bridge Co. Ltd. are being acquired by the Uruguay Government for £7,150,000, divided as shown in the table below, where we give also the sums it is proposed that each company should distribute:—

Company	Received £	Distributing £
Central	5,591,000	5,264,438
Northern	259,000	255,024
Midland	802,000	772,947
Mid. Exten.	130,000	120,000
N. Western	318,000	334,334
Quarahim	50,000	59,406

First reactions to the proposals centred mainly on the difference of £326,562 between the sum received by the Central Railway and the suggested distribution. This is believed to represent provision for compensation to directors and staff, but the view was expressed that it might have been smaller considering the relatively modest total sum being paid for the undertakings. On another page we tabulate the amounts payable under the plan to the various classes of stockholders. The agreement will have to be ratified by each company separately, and it is hoped that meetings for this purpose will be held in late June or early July. Rejection by any one class of stockholder will involve automatically rejection of the sale agreement.

Overseas Railway Traffics

Both the Canadian Pacific Railway and the Canadian National Railways recorded reduced net earnings in March, although the gross receipts were higher. On the C.P.R. the gross increase for the month was £348,000, but the net result showed a decline of £137,250, working expenses being £485,250 higher. The Canadian National working expenses rose by £885,000, so that although there was a gain of £575,250 in gross earnings, the net result was down by £309,750. There is still an increase, however, in the C.P.R. aggregate net earnings for the three months, amounting to £15,250, whereas the corresponding C.N.R. figure shows a decrease of £983,250. Central Uruguay earnings gained £130 in the first week of the fortnight under review, but followed this with a decrease of £1,406, being £83,106 lower on aggregate. Decreases have continued on the Leopoldina, totalling £20,949 in the fortnight under review and giving an aggregate result that is £174,558 below the preceding year. On the South African Railways, the seven days ended April 3 included the first three days of the new financial year, in which the result showed an increase of £19,087 over 1947-48. Egyptian Delta results for the year to March 31 showed a decrease on aggregate of £44,064, although in the two periods ended March 20 and March 31 (10 days and 11 days respectively) a total advance of £2,858 was made.

Rationing Restricts Mid-Week Travel

The efforts that have been made by the railways to induce holiday makers to travel at mid-week rather than at week-ends have met with very little success. In part, this has been ascribable to the well-established custom of the smaller hotels, boarding houses and so forth, of making their arrangements on the basis of week-end to week-end bookings. On the other hand, a very potent source of prejudice against mid-week travel on the part of the holiday maker is to be found in the present rationing arrangements. The ration book is based on weekly periods

and the housewife finds that if her holiday is commenced in the middle of the week, because of the necessity to surrender rations for stays over two days, that she has to go short at the beginning of the first week and, if the vacation is of a fortnight or longer, also at the end of the final week. This is but one example of how Governmental controls react on policies which the Government itself advocates.

London Midland Region Instructional Films

For a number of years the former L.M.S.R. and its predecessor, the L.N.W.R., made use of films for propaganda and staff educational purposes. In our November 28, 1947, issue we gave some details of the arrangements which had been made for the filming of controlled firing methods on locomotives which was then being undertaken by Gaumont British Instructional Limited. Last week we saw four of the films which have been made for the London Midland Region. Two of these were in monochrome and two in colour. Of the former, "Main-Line Diesel," a general interest film, showed the building of No. 10000, the first main-line diesel-electric locomotive to be operated in Great Britain; "Little and Often," a staff instructional film, made as part of a campaign to educate footplate men in controlled firing of locomotives. This film is to be shown at locomotive depots in two mobile instructional units now under construction. The two films in colour were "Animal, Vegetable, Mineral" and "Highway of Steel," dealing respectively with the textile and steel industries and showing the inter-dependence between the railways and the basic industries. A number of films of this type has been made. The London Midland Region may be congratulated as much on the standard achieved in the films as on the enterprise displayed in making them.

Design for an All-Steel Railway Coach

A new design of third class passenger coach, developed to speed up a heavy building programme, is described in this issue by Mr. C. W. Clarke, Chief Mechanical Engineer, Great Indian Peninsular Railway. Sections for the body frame members are of $\frac{1}{4}$ in. steel sheets and no sections longer than 12 ft. are available locally. For speed of erection folder-plate construction was used. Standard underframes had to be accepted, which precluded the building of frame and body as an integral unit, and so a lightweight body was designed permitting unit sections to be manufactured by outside firms and sent to the railway workshops for assembling. The prefabricated body side and roof units are welded, with panel plates and roof sheets riveted to the frame. Fire hazards, which caused the G.I.P.R. serious loss last year, have been reduced by adopting an all-metal roof and a fire-resisting floor material, and the present output of coaches is two a week, though it is hoped to increase this to five later. Roof hatches are provided for the removal of water tanks when coaches are overhauled. The weight of the coach, which is 64 ft. 2 in. long over buffers, is 37½ tons complete with seats and bunks as compared with just over 34½ tons for a similar coach with a wooden body, about half the extra weight being due to the type of flooring used.

Restoring Railway Services after an Accident

Whenever a major accident occurs on a main-line railway arrangements have to be made for the provision of temporary local services and for the diversion of other traffic while the line is being cleared. The arrangements which have to be made are often of considerable technical interest in themselves and sometimes afford noteworthy examples of re-routing and effective improvisation. The recent accident at Winsford, near Crewe, London Midland Region, provided an excellent example of the principal features requiring action after a major accident, and for this reason we give elsewhere in this issue a description of how the situation was met. For these particulars we are indebted to Mr. S. H. Fisher, C.V.O., Chief Operating Manager of the London Midland Region. It is the first case for many years in which the full story of such a situation has been made available, and we feel that the details given illustrate the working of an organisation which reflects great credit on the London Midland Region.

Railway Strike Averted in U.S.A.

On Monday, the eve of the threatened strike by the drivers', firemen's and shunters' unions in the U.S.A. (see our May 7 issue, page 558), President Truman signed an executive order directing the Secretary for War to take over and operate the railways. The unions refused to abandon the strike, however, and later in the day the Attorney-General, on the President's instructions, applied for and received a court injunction forbidding the stoppage. Early on Tuesday it was announced that the unions had agreed to call the strike off. Had it occurred, it would have involved some 190,000 men, who have been seeking a 30 cents per hr. wage increase. Its probable consequences were viewed with deep concern by the administration, because of its world-wide repercussions at a time when the European Recovery Programme is in its crucial opening phase. In present world circumstances it is not unlikely that the unions concerned would have been charged with political motives, particularly as the offer of an increase of 15½ cents an hour (compared with the 30 cents demanded) which they had rejected, was generally considered to be fair. It was felt by other railway unions, also, that intransigence in this case might react to the general disadvantage of railwaymen by leading to changes in the present Railway Labour Act.

Monthly Digest of Statistics

THE *Monthly Digest of Statistics* dated April, which came to hand on May 6, contains no fewer than 151 tables prepared by the Central Statistical Office in collaboration with the statistics divisions of Government departments. Six of the tables deal with inland transport. The first of these records the traffic receipts of the British Transport Commission to March 21 in a less convenient shape than the statement on page 536 of our May 7 issue, bringing the figures down to April 18. Then come three tables of railway statistics, which include a few results for 1948, arranged in the same way as the 1946 and 1947 figures for the former main-line railways. Apparently the compilers of the *Digest* ignore the creation of British Railways as from January 1.

For example, under the heading of "Freight Train Traffic (Great Britain)" weekly averages are given for "freight train traffic originating on main-line railways" for the 4-weekly periods ended January 25, February 22, and March 21. Presumably these figures represent the tonnage originating on the systems of the old companies, together with their joint lines. As the Transport Act was passed in August, 1947, there should have been time for the Government statisticians to design a fresh table applicable to the new organisation. British Railways came into being with a wider charter than the old privately-owned companies possessed.

The April *Digest* does not contain any information about the volume of passenger traffic in the current year. The freight traffic table shows that in each of the three 4-weekly periods this year, the total tonnage was well ahead of 1947, when the fuel crisis threw everything back, and 4 per cent. above 1946. This improvement on 1946 was entirely in minerals and coal; merchandise forwardings were down by 13 per cent. In the first 12 weeks of 1948, the number of wagons of coal loaded was 3,444,000, or 156,000 more than in 1946; the number of wagons loaded with merchandise, minerals, and livestock was 5,480,000, or 412,000 less than the 1946 loadings. The total wagon loadings this year were thus 256,000 below the 1946 figure—a decrease of 2·8 per cent.

When revised tables are prepared for British Railways, we hope that the headings and footnotes will explain the scope of the statistics clearly. At present there is not a word to indicate that the weekly averages of total freight traffic originating cover livestock tonnage. Separate averages are given for merchandise, minerals, and coal, but wagons loaded are put under two headings only—"merchandise, minerals and livestock," and "coal." We know that the Freight Rolling Stock Control Committee prepares the wagon figures, but not whether the committee includes private owners' wagons carrying traffics such as oil and chemicals. Probably it would be an advantage if a fresh mind were brought to bear on the methods of compiling British Railways' statistics and circulating them for general use.

Since the April *Digest* was published and the above was

written, we have received the first issue of *Transport Statistics* issued by the British Transport Commission. We deal briefly with this in an editorial note and also under "Publications Received," and we shall be returning to it in more detail in a later issue. For the present it is sufficient to say that it meets in part some of the deficiencies of the *Monthly Digest of Statistics* and in a number of cases in dealing with traffics, both passenger and freight, and statistics such as train miles, engine miles and so forth, it divides the details by Regions. On the other hand, such information as is contained under the heading "British Railway Vehicles" is not separated into Regions.

Transport in South Africa

MR. W. MARSHALL CLARK, General Manager, South African Railways, recently delivered his presidential address to the South African Centre of the Institute of Transport.* The address was, in effect, a history of overland transport in a country whose contacts with the rest of the world were maintained entirely by sea, until air services were initiated in recent times. In dealing with this interesting subject, Mr. Clark avoided technicalities and spoke in a straightforward style, which must have brought his points home to his audience. He told how South Africa, being destitute of inland waterways, depended on the ox wagon for exploring the interior of the country from 1685, when Simon Van der Stel journeyed to Namaqualand, until the middle of the nineteenth century, when road building began. In 1871, the first regular line of coaches ran to the Kimberley diamond fields. A few years later, railway lines were driven inland from the ports and reached Kimberley in 1885, ousting stage coaches and wagons, which went north to serve the newly discovered Transvaal goldfields. In those days, the mail coach took just over two days for the trip between Kimberley and Johannesburg.

Railway development proceeded so rapidly that 1894 saw the establishment of the "basic radial communication system, the four fingers of the hand stretching to the South African ports, the thumb to Lourenço Marques, and the pulse of the country beating at the apex of these five lines." Expansion continued from the end of the Boer war to 1930 at an average rate of over 300 miles a year. In 17 years since 1930 only 134 miles have been added to the unified system, which came into being after the Union of South Africa was achieved in 1910. The economic railway network had been completed and the road motor-vehicle was suitable for the development of outlying districts.

After explaining the reasons for using the 3 ft. 6 in. gauge, Mr. Clark described how the track had been improved and train speed increased, until the "Blue Train" ran from Cape Town to Johannesburg in 26½ hr.—less than half the time taken in 1892. Over the same period, the loads of goods trains on that route have increased fourfold. Ton-mile costs have been kept down despite rising prices of materials and higher wages.

The South African Railways have, however, a distinctive freight rates problem. The tendency in the last 56 years, Mr. Clark shows, has been to increase rates on high-class merchandise, such as clothing and groceries, and to reduce substantially charges on agricultural products. The ratio between high and low rates has been stretched during that time from about 1½ times to as much as 10 times. This rating policy has helped agricultural development, but may have to be modified in the light of the present-day industrial situation. The question falls to be considered by the Railway Rates Committee, which is now deliberating.

After giving particulars of the work done by railways, harbours, mechanical road transport, and air services, Mr. Clark closed a most instructive address with some remarks on future prospects. He looks forward to a great development of road services, but considers that, whenever passenger or goods traffic is heavy over a definite route and period, rail transport is the more economical and efficient. For that reason, a scheme is being considered for constructing a railway, largely underground, to serve the Alexandra native township in the northern suburbs of Johannesburg. Air

* "Transport in South Africa," read by Mr. W. Marshall Clark, General Manager, South African Railways, before the South African Centre of the Institute of Transport.

services may be expected to expand during the next decade or two; but their present carryings are insignificant compared with either rail or motorcar traffic. In the provision of the nation's vital services—the carriage of coal, foodstuffs, raw materials, and industrial products—there is not, in Mr. Clark's view, any practicable or economic alternative to rail transport.

Tanganyika Railways & Ports Services

IN his report on the operations of the Tanganyika Railways & Ports Services during 1946, the General Manager, Mr. J. R. Farquharson, says that although passenger traffic passed its peak during that year, the decision of the British Government to proceed with the groundnuts scheme has altered completely the traffic prospects during the next few years. The estimated traffic for the producing areas served by existing lines exceeds the present goods wagon capacity, and arrangements to secure additional stock have been put in hand. Additional staff will be required as well, and recruitment from overseas may be necessary, but it is considered that this should be kept to the absolute minimum so that the greatest possible opportunities may be given to the local staff. The opening of a new 16-mile branch from the Central Line at Msagali to Kongwa in connection with the groundnut scheme was reported in our issue of February 27.

In an introductory chapter, the General Manager reviews the traffic of the war years. From 1942 traffic increased phenomenally, and was maintained at a very high level until it began to recede slowly in 1946. The average mileage per 4-wheel unit of coaching stock reached a maximum of 46,001 in 1945, equivalent to 126 miles a day. In the same year goods wagon-mileage reached a maximum of 16,422, representing 45 miles a day per vehicle in stock. In spite of the intensive use of rolling stock, arrears of maintenance are not serious, and the condition of locomotives and vehicles compares favourably with that of other systems. Late in 1940 a regular road service was introduced linking the Tanga and Central lines between Morogoro and Karogwe. Since January 1, 1943, road services have been provided also between the Central line and the Southern Highlands Province.

Revenue account receipts of the railway, road, and water transport services for the year ended December 31, 1946, were £1,342,000, and after meeting working expenditure and renewals contributions the net earnings were £373,857. The year closed with a surplus of £90,636, after meeting charges. Some results are tabulated below:—

	1945	1946
Route-mileage open	1,356	1,360
Train-miles	1,639,214	1,018,588
No. of passengers	1,524,086	1,526,101
Paying goods tonnage	366,451	368,857
Gross receipts	1,091,704	1,169,307
Working expenditure	770,456	800,255
	Per cent.	Per cent.
Operating ratio	70.6	68.4

Passenger journeys increased in total from 1,524,086 to 1,526,101, although there was a small decline from 12,246 to 11,471 in the number of first class passengers. It is hoped that a reduction in first class fares from 18 cents to 14 cents per kilometre will induce an upward movement from the second class and help to offset the effects of the reduction in military travel, the expansion of internal air services, and the lifting of petrol restrictions. Public goods traffic rose from 357,359 tons to 373,823 tons; revenue from this source reached £570,308 on the Central line, as compared with £482,469, and £128,414 as against £125,383 on the Tanga line. There has been a rapid expansion in transit traffic to and from the Belgian territories, while similar traffic to and from Northern Rhodesia produced total receipts of £8,558 in 1946, as compared with £7,299 in the preceding year.

Receipts from the Lake Tanganyika services produced £11,143, an increase of £566, and those on Lake Victoria earned £6,103, as against £4,838 in the preceding year. Useful work continued to be performed by the coastal services operating between Dar es Salaam and Tanga, which carried a total of 6,060 tons, an increase of 285 tons. Road transport operations in 1946 resulted in a loss of £3,044, comparing with a loss of £9,199 in 1945.

Engine-mileage increased to a new high level, and although coal consumption per engine-mile again showed an increase,

this was balanced by a decrease in the consumption of wood-burning locomotives. There was a fall from 19,128 miles to 17,951 miles in the mileage per engine failure, due principally to the low standard of the footplate staff, which it was difficult to raise during a period of intensive traffic. The track, in general, has been maintained to a standard which permits good running at the maximum speeds in force. Realignment works were completed between Morogoro and Mkata on the Central line, adding 4 miles to the route-mileage open, and in all 88,152 cu. ft. of ballast were put in the track on the Central and Tanga lines. Surveys were begun for a branch from Kaniwa, on the Central line, to Mpanda.

The Pakistan Railway Budget

FOR the present, at least, the railway budget of Pakistan is forming part of the general budget of the Dominion, as was explained briefly in the Overseas columns of our April 9 issue. The Finance Minister in his budget speech said it had been decided that in the circumstances prevailing in Pakistan, it would be an unnecessary refinement to have either a separate railway reserve fund, or to maintain the distinction hitherto made between strategic and commercial lines. This amalgamation of budgets would not, however, mean any relaxation in the matter of running the railways on a strictly commercial basis, or in maintaining proper commercial accounts. The depreciation fund would continue, and provision therefor had been made at the usual rates.

The result of working for the first 7½ months, namely, from August 15, 1947, to March 31, 1948, was expected to be a deficit of Rs. 150 lakhs, the receipts amounting to Rs. 18.20 lakhs, and the expenses, including interest, amounting to Rs. 19.70 lakhs. This big loss was inevitable, owing largely to the fall of traffic in the Punjab after partition, refugee traffic, and to the short supply of coal from India and consequent running of only a skeleton train service. There had been an improvement in the position recently, and on the assumption that the improvement would be maintained, it had been estimated that the budget for 1948-49 would show a small surplus of Rs. 3 thousand, the receipts and the working expenses, inclusive of interest charges and provision for depreciation, both being of the order of Rs. 32.59 lakhs.

The Minister described measures to offset the estimated deficit in railway revenues by raising rates and fares. An increase of about 22 per cent. was made on January 1 this year, and the budget included a measure for raising the mail train fare by 5 pies a mile third class and 7 pies a mile first class. Hitherto the same fares had been charged by ordinary and mail trains. The increase in earnings as a result of these steps was expected to be of the order of Rs. 4 crores a year on the basis of normal train services.

Special steps have been taken to prevent ticketless travel on the Pakistan railways were described by the Minister. These included appointment of railway magistrates; intensive checks carried out by railway officers with the assistance of the police; and increased publicity among the public and the staff. An Ordinance also was issued amending the relevant sections of the Indian Railways Act, 1890, to tighten the procedure for dealing with ticketless travellers. He dealt also with that portion of the Jodhpur Railway (about 330 miles in length) lying in Sind Province, which belonged to the Government of India. This section had been worked by the Jodhpur Railway under a contract which was liable to termination on twelve months' notice. In July, 1947, the Muslim members of the Railway Committee for the Division of Assets & Liabilities requested the Government of India to give twelve months' notice to the Jodhpur Durbar for the termination of that contract. The intention was that the working of this section should be taken over from the Durbar and entrusted to the North Western Railway Administration. This notice would expire in July this year, when the section of line in question would be taken over from Jodhpur and would form an integral part of the North Western Railway. Details of the transfer were now being arranged by the North Western Railway.

The capital section of the budget included a provision of Rs. 1.53 lakhs for the current year and Rs. 5.50 lakhs for the next year in respect of the railway works programme. Of that provision a sum of Rs. 80 lakhs would be chargeable to the

depreciation fund in the current year, and Rs. 150 lakhs in the next year. The provision for the current year mainly represented expenditure on works in progress; and that for next year covered expenditure on works necessitated by partition and certain development works, such as expansion of harbour facilities at Chittagong. It included a sum of Rs. 2 crores for the purchase of the Mymensingh-Bhairab Bazar and Khulna-Bagerhaut sections of the Eastern Bengal Railway, and for purchase of rolling stock and other equipment for the Sind section of the Jodhpur Railway.

The debate on the budget was made the occasion for some lively criticism of railway facilities in Pakistan, with complaints of compartments with no lights, fans, or water; passengers packed like "human sardines"; and lack of seats on railway stations. One speaker contended that the only arrangements made by the Eastern Bengal Railway were those for the withdrawal of services, and the Government was upbraided for using the refugee problem as a convenient excuse for railway shortcomings of all kinds. A reply was made by the Communications Minister, who argued that Pakistan had inherited a railway system of which the Eastern Bengal Railway, at least, was literally war-shattered. Both the E.B.R. and the N.W.R. in Pakistan were only portions of former railways, whereas India had acquired some railways which were fully organised and intact. Their position became worse after partition, for they had got very little of such stores as were available in India. Although entitled to great quantities of stores, their best efforts had failed so far to secure them. The Minister alleged that members of the staff who had opted for service in India lost all interest in their jobs after partition was effected, and many had been guilty of acts of sabotage. Instead of the transfer of staff taking place in an orderly manner, wholesale desertions had occurred, while there had been great difficulties over the transport from India to Pakistan of staff who had elected to serve there. When they at length arrived, the Pakistan railways were faced with a surplus, to say nothing of the difficulty of allocating those who were required to posts of appropriate seniority. In view of their difficulties he considered it as nothing less than a miracle that the railways had survived, but he felt he could say that there was now an improvement. They had not been beaten down as their enemies wished, and as they were trying to accomplish even now in several ways.

Mobile Testing Plant

A FULL and authoritative account of the mobile locomotive testing plant developed by the L.M.S.R., was given in a paper which Dr. H. I. Andrews, of the Engineering Research staff, at Derby, recently presented to the Institution of Mechanical Engineers.* This valuable report covers a wider scope than is indicated by its title, for it includes an excellent historical introduction to the subject, with a short description of the general development of methods of testing locomotives under constant conditions of working. Until the matter was taken up seriously by the L.M.S.R. in 1936, practically all work in this direction had been carried out on the Continent; and, indeed, until the publication of Mr. E. L. Diamond's review of the subject in *The Railway Gazette* (1935, vol. 62, p. 691), little was known about it in this country. That, however, is not entirely due to British apathy or insularity, for geographical factors in this country make it exceedingly difficult to select a long stretch of level line on which suitable tests could be conducted under constant conditions. Consequently, it became necessary to consider a method of testing in which the power-absorbing agency attached to the locomotive could be adjusted during a run, so as to compensate for changes in the resistance of the track due to varying gradients and curvature. If this were practicable, then such a stretch as the 77 miles between Willesden and Rugby, which includes gradients of 1 in 330 and curves down to 50 ch. radius, could be used for the tests.

In 1936, Dr. Andrews made his original suggestion that two existing electric motor coaches could be modified for rheostatic braking, with separate excitation of the generators and a water resistor to dissipate the absorbed power. The fields were to be supplied from a thyatron rectifier, the output of which

could be controlled to maintain constant speed (as given by an axle-driven tachometer). In principle, this was the method adopted, but it was felt that instead of using this temporary set, a more permanent testing plant, with a dynamometer car and a special tender for measuring coal and water consumption, would be worth while. The inconvenience of gear changing which normally would have been inevitable in the test unit, to enable it to work throughout the wide range of speed over which maximum power was required, was avoided by using three braking units instead of one. Each braking unit had four generators totalling 1,500 h.p., but had different gear ratios corresponding to maximum speeds of 50, 90, and 120 m.p.h. Different combinations of these units are used to suit the tractive effort at the time. The use of three mobile units instead of one, also enabled the weight to be spread over a greater number of axles—an important point, as even with the braking distributed between three separate vehicles, the weight of each in working order exceeds 67 tons. By May, 1939, the first of these units was ready, but the war delayed the completion of the others until 1947, when the special tender was finished; the new dynamometer car has not yet appeared though, and the former Lancashire & Yorkshire Railway's dynamometer car is used instead.

An illustrated general description of the plant was given in our issue of September 5, 1947. The present paper gives certain additional details, among the most interesting of which is the form of flexible axle-drive in the mobile test units, which we understand has been the subject of a patent by Dr. Andrews in connection with the English Electric Co. Ltd. The device will accommodate the axle if it is displaced laterally, or is out of alignment; it allows a vertical movement of $\pm \frac{1}{4}$ in. and is aimed at improving the riding and reducing excessive wear, which is inflicted on the track as a result of the high unsprung weight. The drive, which kinematically resembles an Oldham coupling, comprises four links and a floating member and connects the gearwheel with a disc crank mounted on the axle; it allows no angular discrepancy between driving and driven members, an important feature when the drive is required to operate at speeds up to 900 r.p.m.

This testing plant has been so constructed that it can be used for testing diesel as well as steam locomotives. It already has been used for a series of resistance tests between Rugby and Peterborough, in which the speed of the train was kept constant by the resistance of the braking unit, the resistance of the vehicles on suitable sections of track being measured directly by the dynamometer. These results, of course, must be corrected for gradient and wind effects, but no allowance need be made for acceleration. The performance of railcars and motor coaches also can be determined by this method. A great advantage of this type of test is its flexibility—it can be used for a number of railway investigations other than measurement of performance. The resistance of a train on a particular section of track can be measured and reproduced elsewhere, or the performance of a locomotive can be simulated on a line over which it is not permitted to run.

The ultimate value and justification of this ingenious, complicated, and highly flexible testing plant lies in the practical application of the results obtained by it. After making extensive tests with brake locomotives, the German State Railways arranged for its locomotives to be given such duties that an evaporation of 11.07 lb. of steam per lb. of coal burned would be achieved. As a result, a great saving in fuel was effected. In Russia, Professor Lomonosoff, whose contributions to the road testing of locomotives call forth the highest tributes from Dr. Andrews, succeeded in saving annually about ten times the total cost of his experimental department. The information which the new plant is capable of yielding will be of great value to the new railway administration in this country, which will be in a better position than any previous managements to take advantage of it. Such information, coupled with the results to be obtained from the Rugby experimental station in the future, should play a notable part in the conservation of fuel and the achievement of higher efficiency. After all, the days for big advances in efficiency, like that offered by superheating, are over, as Mr. E. S. Cox pointed out in the discussion on Dr. Andrews' paper and it now is necessary to find out what small gains can be made in the overall economy of the locomotive.

* "The Mobile Locomotive Testing Plant of the L.M.S.R.," by Dr. H. I. Andrews, read before the Institution of Mechanical Engineers, on April 16

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Railway Statistics

Hampstead. May 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Referring to my letter in your April 30 issue and the letter over the pseudonym "Accurate" in your May 7 issue, a further study of page 28 of the returns prepared by the Statistical Committee of the Railway Executive Committee shows where the *Monthly Digest of Statistics* has gone wrong. Its compilers have used the Statistical Committee's figures for the main lines for the years 1943 to 1946, which include joint line results and livestock tonnage. The committee took care to adjust the 1938 statistics in its table to put them on a comparable basis, but the *Digest* has worked on the figure in the annual returns for 1938, which did not cover either joint line or livestock tonnage.

On the proper basis, the comparative figure for 1938 is 5.06 and not 4.89 million tons as stated in the *Digest*. The weekly averages for 1935 to 1937 will be equally far out, but only the Statistical Committee can adjust them. It is a great pity that the committee is not left to prepare the whole of the railway statistics for the *Digest* in the form to which railwaymen and statisticians interested in transport are accustomed.

Yours faithfully,

STATISTICIAN

South African Railways Overseas Mission

South African Railways,
General Manager's Office,
Johannesburg. April 27

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In your editorial comment in the April 16 issue on the South African Railways Overseas Mission (1946), reference is made to two "misunderstandings" on the part of the mission; the first being an apparent misjudgment of the amount of attention given by the British railways to the training of staff, and the second, a lack of appreciation that the traffic apprenticeship schemes on British railways were designed to prepare the best of the younger men for promotion to key positions.

I want to say immediately that in reaching the conclusions which have been commented on, there was no lack of appreciation of what the British railways have done in the past, and are still doing, in regard to the two matters referred to; nor was there any intention wittingly to criticise any overseas railways. When conducting their investigations, the members of the mission were concerned primarily with an assessment of the value of overseas railway practices and their possible application in the solution of problems and difficulties confronting the South African Railways.

As regards the two conclusions which have evoked critical editorial comment by *The Railway Gazette*, I would point out that the mission's conclusion in regard to the training of staff related exclusively to departmental facilities for the theoretical training of railway staff, as distinct from facilities provided by non-railway educational institutions. If the matter is viewed from this angle, I think it will be appreciated that the conclusion that any departmental training which is undertaken by the British railways "is devoted mainly to instruction in trains working for which purpose signalling schools, equipped with model railways, have been provided at certain centres," is substantially correct.

In so far as the second point is concerned, namely, a specialised scheme of training members of the staffs of overseas railways for higher administrative positions, I wish to point out that the conclusion that very little is done by the railways visited overseas (the mission's report referred to all the railways visited and not only to the British railways) is literally true. As regards the British railways, I gave a fairly full description of the apprenticeship cadet training schemes, as well as the facilities afforded by the G.W.R. to senior members of its clerical staff for attending instructional classes at the London School of Economics and other universities and technical colleges. This was dealt with under the heading "Selection and Training of Officers for Higher Administrative Positions," so that obviously the mission appreciated the full purport of the apprenticeship schemes in operation on the British railways. In view of this, I think the comment that the finding of the mission under this head was "equally wide of the mark" probably might have been based on the assumption that the conclusions referred to the British railways only.

I would not like the impression to get abroad that the South African Railways Overseas Mission had reached con-

clusions which were erroneous and not fair to the overseas railways concerned; and if it is possible for you to remove any doubt which might have arisen I shall be much obliged.

Yours sincerely,

D. H. C. DU PLESSIS,
Chief Harbour, Shipping &
Development Manager

[We refer to our correspondent's comments in an editorial note on page 561.—Ed., R.G.]

Reduced Railway Fare Facilities

24, Greville Place,
London, N.W.6. May 6

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In an editorial note on April 30 you question whether the introduction of cheap fare facilities by the railways on June 1 is a wise move, and suggest that it may be designed to accord with the Government's call for "reduced prices and the absorption of the effect in the profit margin of the undertaking." It may be of interest, therefore, to try and compare the effects of price reduction, as called for by the Government, when applied to railway passenger travel and when applied to other forms of consumer "satisfactions."

The Government campaign for lower prices is designed to lower the cost of living, to reduce profits (and thereby lower, or prevent an increase of, dividends), and to stop agitation for higher wages which, if granted, would increase costs of production and handicap the export drive. Broadly, the supply of consumer goods for the home market is limited by Government controls, and an alteration in price cannot affect the supply. Where the demand is elastic there cannot be an increased supply to meet the increased demand, and the same quantity of goods will be sold at the lower price as was sold at the higher, with the result that, other factors remaining unchanged, profits will be lower and the aims of the Government attained.

The operation of the railway cheap fare facilities may have different effects. The lower fares should bring an increased number of passengers, but, if the gross receipts are higher than before, profits also will be higher since the railways will not incur appreciable additional costs in handling the increased traffic. Thus the railways can get greater profits with lower prices, a result denied to manufacturing industry where output is limited. This result from cheap fares would be in line with pre-war experience, when railway policy was based on the elasticity of demand for certain types of passenger travel, which could best be satisfied by differential charging, and maximum revenue thereby obtained.

There are at least two circumstances in which the railways can attain the lower prices and profits which the Government desires, in general, throughout industry; either the fare reductions can be such that existing trains, even when fully loaded, bring in smaller gross receipts than hitherto; or the demand for rail travel can be so inelastic at a certain price level that a reduction in fares, such as that to operate on June 1, does not lead to an increase of passengers sufficient to increase receipts. The effect of the cheap fares which are to be reintroduced should be the same as that of pre-war cheap fares, unless there has been a flattening of the demand curve of rail travel.

Normally, the demand for this travel is inelastic, and cheap fares divert purchasing power from goods or other services and attract extra passengers to the railways; but the present shortage of goods and the restriction of road travel have lessened the competition to which rail travel is subject, so that there is a smaller margin of demand which can be diverted from other forms of consumption. Since people cannot buy goods with their money, it may be that the higher fares are not the deterrent that they were, and in such circumstances cheap fares may not attract sufficient extra travellers to increase revenue.

On the other hand, any general lowering of prices will tend to free purchasing power which cannot be spent on goods, which are limited in quantity, but which can be spent on services, such as rail travel, capable of more intensive use without additional labour or equipment being required; whilst there is the reduced marginal demand for goods or other services which cheap fares can divert to rail travel e.g., some of the beer and tobacco referred to in your leading article, "The Worker's Pleasures," of April 23, may be less attractive than a day excursion when the cheaper fares operate. At prevailing prices demand will not be diverted from beer and tobacco unless there is a change of habits. Diversion will tend to come only if the relative price of transport is reduced.

Whether there has been a change in the elasticity of demand for rail travel can be ascertained only by experience. If this experiment brings decreased profits which do not affect the margin required for the railways to be financially sound, the result will be in accordance with the Government's wishes; if there are decreased profits which the railways cannot afford,

the experiment will have to stop, unless travellers, in their capacity as taxpayers, make up the deficit. If there is an increase of profit within the margin required, the public will benefit, both as travellers and taxpayers, and if there is an increase of profit above the required margin, other benefits can be given to the public.

Yours faithfully,

ALUN WILLIAMS

"Thurstaston," 22, Heathfield Road,
Huddersfield. May 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Undoubtedly the financial losses incurred by the railways last year will be aggravated by the odd practice of running fairly large numbers of empty passenger trains. This appears to be quite a frequent practice where the high fares have almost killed the traffic.

Would not a preferable policy to abandoning the traffic to the already congested roads be to run all services on a permanent excursion rate where the population density of the district will not support the present normal rating? Experiment may show encouraging results.

I am, Sir,

Yours faithfully,

WILLIAM B. STOCKS

The London Traffic Problem

54, Parliament Street,
London, S.W.1. May 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—I have read with interest your correspondent's article on the London traffic problem, in *The Railway Gazette* of April 2.

Whilst I agree with his views in the main, there are two points I would like to raise. (1) London Transport has not pushed out its system into the outer suburbs in rivalry to the main-line suburban systems; the word "rivalry" is redundant, as since its inception the board aimed to co-operate with the main-line railways and not to indulge in wasteful competitive schemes. (2) With regard to his comments on the low carrying capacity of tube trains as compared with main-line trains, he has not taken into account the standing accommodation of London Transport trains, which is considerable. In point of fact, the rush-hour capacity of a seven-car tube train is approximately 1,000 passengers. I agree, however, that for the purposes of his comparison he is counting only the number of seats available, but, after all, the standing passengers are not a factor to be ignored, and the seating capacity is not to be taken as the total capacity of a train, especially in peak hours.

Yours faithfully,

P. HOTCHIN

British Railways—Livery, Station Design, and Big-Engine Policy

33, Upper Belgrave Road,
Clifton, Bristol, 8. April 19

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Much interesting information has been given, and food for thought provided, by the various articles and readers' letters which have appeared in recent issues of *The Railway Gazette* on the above subjects. May a non-professional, non-technical "railway man" express a few points of view on these matters?

I am with those who deplore any decision to paint locomotives and rolling stock of all regions in uniform colours. I agree particularly with Mr. L. Lawrence when he urges "a little variety in this drab world," and I like his suggestion of the "historical and aesthetic value in reproducing the liveries of some of the old companies." By this he means, of course, some of the pre-1923 grouping liveries—and he is doubtless thinking of Caledonian or Great Eastern blue; Brighton improved engine green; Midland lake, and so on?

I am of opinion that a covered-in station is preferable to one with canopy roofs, and I agree with those who complain of the inconvenience of rain, wind, and draughts under the latter. I admit that the "overall" roof collects smoke and sooty grit, but I think these are "lesser evils."

Your article of April 2 on "Big-Engine Policy," and readers' letters which have followed it, certainly have opened up a new line of thought, to me at any rate. I had hitherto regarded larger, heavier locomotives and longer trains as being merely the logical outcome of railway development, but I can appreciate now that there is much to be said for medium-length, medium-powered trains. Living as I do in Great Western territory, I remember that two of that company's most famous trains, the "Cheltenham Spa Express" (better

known as the "Cheltenham Flyer") and the "Bristolian," were normally six- or seven-coach trains, hauled by "Castles" in preference to "Kings"; and that their standards of performance and punctuality were very high.

It is the people who are interested in trains only as a means of conveying them from one place to another safely and with as little delay as possible whose viewpoints on railways, whether right or wrong, should be considered most seriously. The war and other circumstances of recent years have had serious effects on the railways, so that while travel by train is still the safest means of transport, it is well below pre-war standards of safety, comfort, and punctuality. Before the railways again pay much attention to the naming of "crack" expresses, they ought to concentrate on essentials of track re-laying, re-building and repairs of locomotives, rolling stock.

To sum up, the essentials seem to me to be:—

(1) Improved safety, comfort and punctuality in train running, which implies more repair work, more and better coal, better maintenance and—dare I say it?—greater operating efficiency.

(2) A general smartening-up of engines, rolling stock, stations, and other railway property. As has been said already, I hope there will not be a "drab uniformity" about our trains, but let each region have its distinctive colour schemes, both for locomotives and coaches.

The pros and cons of heavier motive power and longer trains can be weighed up only in conjunction with my first essential.

Yours very truly,

RALPH L. WILKINS

Livery of British Railways

Eastern & North Eastern Regions,
11, Blandford Square. May 10

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—In his letter under the above heading published in your issue of April 16, Mr. Raymond M. Palmer asked me "to explain why the general standard of cleanliness of the Eastern Region is so low as compared with locomotives of the other Regions."

The statement is hardly correct, but it is true that the cleanliness of locomotives is dependent upon the availability of cleaning staff, and there is undoubtedly a shortage of cleaners at the Eastern Region locomotive depots in London. At some of the country depots, however, labour is reasonably easy to obtain, and the locomotives shedded there will bear comparison with those of any other Region. Unfortunately, the housing and lodging position in London prevents any large number of cleaners being transferred from rural or provincial areas.

Everything possible is being done to raise the standard of cleanliness; we are employing some Polish labour and are constantly advertising in the Press for recruits. Despite these efforts the number of cleaners on both the Eastern and Western Sections of the Eastern Region remains abnormally low, and in the Stratford district alone we have at present no less than 250 vacancies.

Shortage of cleaning materials also presents problems. It is sometimes difficult to provide even the men who man the engines with sufficient cloths with which to clean their hands.

Yours faithfully,

GEORGE DOW,
Press Relations Officer

Unbroken Main-Line Crossing for Catchpoints

The Railway Executive (Western Region),
Divisional Engineer's Office,
Devon Place, Newport High Street. May 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—The article on page 549 of *The Railway Gazette* of May 7 is of great interest.

The principle of the ramped wing rail in connection with catchpoints was adopted by the ex-G.W.R. in 1943. With the old type "E" catchpoint, the high rail of the catchpoint terminated in a timber block, and it was found that in cases where the catchpoint was brought into use, the wheels of vehicles fouled the running rail, and the vehicles had a tendency to travel towards the running line, which the catchpoint was designed to protect.

The block was omitted therefore, and a ramped wing rail provided so that the height of the wing was $1\frac{1}{2}$ in. above the running rail, and the wheels of vehicles therefore passed over the running rail without touching it. The installation was tested by fly-shunting vehicles through the catchpoint at varying speeds.

The new design is known as the type "E(R)" catchpoint.

Yours faithfully,

E. C. COOKSON

The Scrap Heap

CONFESSION

"There was far too little detailed preparation in the formulation of schemes of nationalisation, and in consequence we found ourselves with legislation that had to be completed without the necessary blueprints upon which we could have proceeded much more expeditiously in the right direction. . . . When the mining industry was nationalised, for example, this had been on the Labour Party programme for 50 years—we thought we knew all about it; the fact of the matter was, we did not."—*Mr. Shinwell, reported in "The Times."*

DAMP SQUIB

A message chalked in a first class toilet compartment on a Cromer-Liverpool Street train on April 5, stating that "This train will be blown off the line at 7.40 p.m., caused the police to search the train five times, once at Liverpool Street, which it left at the 1 p.m. for Norwich and Cromer; at Shenfield, which it left 49 min. late; at Colchester, where the train was cleared while 20 policemen made a search; at Norwich, where the train was by now 79 min. late; and finally at Cromer, where the train was afterwards shunted to a siding and sealed. The message is believed to have been a hoax.

EASTERN REGION UNDERTAKERS

During excavations in connection with the Liverpool Street-Fenchurch Street-Shenfield electrification an old burial ground dating back more than 150 years was discovered on the down side of the railway at the Globe Road end of Bancroft Road, Mile End.

A number of skeletons and complete coffins has been uncovered. The skeletons are being reinterred in wooden boxes and buried in Manor Park cemetery. British Railways providing the boxes.

Excavations were stopped at the depth then reached and the work replanned to avoid further possible disturbance of human remains.

CALEDONIAN RAILWAYS SALARIES IN 1849

The following is a reproduction of the first appendix to the annual report and accounts of the Caledonian Railway Company for the year to December 31, 1849. At that time the standard rate of income tax was 7d. in the £, and the cost of most commodities, either luxuries or necessities, was at a very different level to the present.

STATEMENT SHOWING THE SALARIES IN THE FOLLOWING OFFICES AT 31st DECEMBER, 1849:—

Secretary and General Manager's Office.		Accountant's Office.		Traffic Audit Office.		Treasurer's Office.		Transfer Office.	
Captain Coddington.....	L. 1800	Mr Ferguson, Accountant.....	L. 250	Mr Ward, Chief Clerk.....	L. 200	Mr Rankine, Treasurer.....	L. 600	Mr Colbron, Chief Clerk.....	L. 270
Mr Gibson, Assistant Sec.....	300	Clerk.....	140	1 Clerk at L.80.....	80	Cashier.....	100	1 Clerk at L.143.....	143
Clerk.....	110	Clerk.....	90	1 do. at L.65.....	65	Clerk.....	70	1 do. at L.89.....	89
	70			3 do. at L.90.....	270			1 do. at L.53.....	53
				2 do. at L.52.....	104			2 do. at L.26.....	52
				1 do. at L.30.....	30				
	2280		480		639		770		616
Office in Glasgow.		Goods Manager's Office.		Superintendent's Office, Carlisle.		Locomotive Superintendent's Office.		Engineer's Office.	
Mr King, Mineral Manager.....	L. 1000	Mr Johnstone, Goods Manager.....	L. 250	Mr Addison, Superintendent.....	L. 400	Mr Sinclair, Superintendent.....	L. 500	Mr Collier.....	L. 850
Mr Linn, Superintendent.....	300	Clerk.....	90	Assistant.....	200	Assistant.....	175	Assistant Engineer.....	275
Mr Greig, Accountant.....	200	Clerk.....	52	2 Clerks at L.46, 16s.....	95 12	1 Clerk at.....	155	Ditto.....	250
1 Clerk at L.95.....	95			1 do. at L.36.....	29 0	1 do. at.....	104	Ditto.....	250
1 do. at L.45.....	45	Mr Poole, Goods Manager, Liverpool.....	200			6 do. at.....	338	Ditto.....	150
		A Collector (mineral dues).....	52					6 Inspectors.....	603
	1740		644		119 12		1269	Office Boy.....	13 0

Appendix to the annual report and accounts of the Caledonian Railway Company, December 31, 1849, showing salaries paid at that time, and referred to in a paragraph above

THE LAW'S DELAY

The Canadian Pacific Railway was fined \$10 and costs because a lawyer was held up for 20 min. at a railway level crossing. Mr. Robert C. Parker, of Toronto, laid a charge under the Railway Act which declares it is unlawful for a train to shunt over, or obstruct, a street crossing for more than 5 min. The C.P.R. will appeal against the fine.

TIMETABLE COVER COLOURS

The summer timetables of British Railways (coming into force on May 31) will be the first to be issued since nationalisation. Separate books will be available for each of the six regions, with distinctive coloured covers as under:—

Eastern Region, blue cover.
London Midland Region, red cover.
North Eastern Region, tangerine cover.
Scottish Region, pale blue cover.
Southern Region, green cover.
Western Region, brown cover.

All the books will be of standard size and form, but apart from a number of changes to secure uniformity, no material alterations have been made in the display of the train service information.

"OH, MR. PORTER!"

From Washington comes a pleasant story of the British Embassy official who rang up the railway station to book a seat for Lord Inverchapel, the British Ambassador.

To his astonishment the man who answered said: "We aren't running any more trains. We've decided the whole thing is quite futile—sending trains up to New York and then bringing them back again. We just got bored."

Then the speaker hung up. He was Paul Porter, formerly at the head office of Price Administration, who is now practising law in the capital. His telephone number is almost exactly the same as the station number. Frequently called up in error, he found the temptation irresistible when he heard the British accent.—"Peterborough" in "The Daily Telegraph."

A LOCOMOTIVE TIPSTER

Mr. R. Mahoney writes: "While awaiting the arrival of the 'Flying Scotsman' at Tay Bridge Station one evening last year, I was pondering on the possibility of getting the winner of a big handicap which was due to be run next day at Hurst Park. I was trying to find a pointer without any success. Then the train came in. The engine, a "V2," was numbered

888. This seemed to strike a chord. Next day I looked up the race card and found a horse with eight letters to its name. It was carrying eight stone, and in the betting forecast stood at eight to one. A shame to take the money. To keep everything on a straight line I put on eight shillings to win and eight for a place. It worked like a charm. The horse came in eighth."

Major R. D. K. Curling, Chairman of the British Automatic Co. Ltd., served up facts and figures with Transatlantic flourish at the annual meeting. . . . Five express locomotives' load of pennies were pushed through the slots. Stacked (carefully) they would have towered 60 miles high. Not given: Length of net dividend in pennies—60 miles.—*From "The Daily Mail."*

100 YEARS AGO

From THE RAILWAY TIMES, May 13, 1848

Parliamentary Railway Intelligence.

PROCEEDINGS IN THE HOUSE OF COMMONS ON RAILWAY BILLS.

The following Resolutions were reported from the Standing Orders Committee:—

"That in the case of the following Petitions, the standing orders ought to be dispensed with":—

Wednesday, May 3.

North-Western (Diversion at Skipton, Casterton, and Sedburgh).

The following Bills have been reported; Report to lie on the table, and to be printed:—

Thursday, May 4.

Manchester, Sheffield, and Lincolnshire (Ashton Canal Purchase).

Manchester, Sheffield, and Lincolnshire (Sheffield Canal Purchase).

York, Newcastle, and Berwick, late York and Newcastle (Main Line Improvement, &c.).

Monday, May 8.

Aberdare Act Amendment (Lease of Line and Works to the Taff Vale Company).

Leeds and Thirsk (Alteration of Levels of Leeds and Hartlepool in Eaglescliffe, Preston, and Stockton, &c.).

Tuesday, May 9.

North British (No. 1), (Increase and Division of Capital).

Midland (Alteration of the Line and Branches near Wellingborough, and Approach to the Wellingborough Station).

Waterford, Wexford, and Wicklow.

Thursday, May 11.

Chester and Holyhead (Power to purchase, &c.). Furness.

The following Bill has been read a third time and passed:—

Friday, May 5.

East Indian Company Incorporation.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

CANADA

Ontario Northland Railway

Traffic on the Ontario Northland transport system (owned by the Ontario Government) was at "unprecedented levels" during 1946-47, according to the annual report, and is expected to be even higher for the year ended March 31 last. There is every reason to believe, says the report, that gross revenues for the year ending March 31 will exceed all previous records, but it is noted that expenses also were higher and net earnings therefore would be lower. Last year operating revenues increased from \$7,827,501 to \$8,985,895, continuing to show an upward trend that began during the war. Expenses were \$7,032,387, an increase of \$1,159,416 over the previous year. The increase in revenue was \$1,158,394, but net revenue was \$94,676 lower.

The report says it is clear that without the present volume of traffic, it would not be possible to maintain net earnings at anything like present levels. There was a surplus for the year of \$12,842,785, which included an operating profit of \$1,295,654 plus the balance from 1945-46 of \$11,557,214.

Cost of the Rates Inquiry

The Board of Transport Commissioners' recent rates inquiry cost the Dominion \$20,034, it has been announced by the Hon. Lionel Chevrier, Minister of Transport, in the House of Commons. Replying to a question he also said the Government had not retained counsel in the case, and had incurred no legal expenses. The total presumably did not include such fixed expenses as salaries of the commissioners and their staff, but would include travelling expenses for cross-country hearings, and the cost of recording the 5,500,000 words of evidence in the inquiry.

UNITED STATES

New Santa Fe Streamliner

On April 3 the Santa Fe introduced a new streamline diesel train between Chicago and Galveston, Texas. The train leaves Chicago at 6 p.m. and arrives at Galveston at 8.15 p.m. the next day. In the reverse direction, departure from Galveston is at 6.45 a.m., and the train reaches Chicago at 9 a.m. the next day.

A variety of sleeping accommodation is provided in the new rolling stock for this train, which is called the "Texas Chief," and the latest innovations for comfort have been introduced in the carriages for daytime travel. A two-channel broadcast system has been installed throughout, for relaying musical programmes and making announcements. The dining car provides services ranging from full-course meals to sandwiches and coffee at a lunch counter.

Missouri Pacific Radio Installation

A complete subdivision of the Missouri Pacific, consisting of 193 miles of single track between McGehee (Ark.) and Alexandria (Louisiana), has been equipped with radio and inductive communication apparatus.

For two-way communication between locomotives and brake vans, or between trains, normal radio equipment is used, while inductive communication between trains and the lineside telegraph

wires provides the link between goods train brake vans and offices at seven stations.

Considerable saving in time is found to result from the use of radio for passing information which formerly had to be conveyed by hand signals, or by verbal messages entailing staff walking up and down the train. Power for the radio equipment in brake vans is supplied from a 3-kW., 32-V. d.c., axle-driven generator charging a 300-a.h. Exide battery that operates a motor-alternator. On the locomotives a turbo-alternator provides a.c. at 110 V. direct to the transmitter and receiver. The two radio sets are mounted in a case under the tender.

ARGENTINA

Operating Committee's Deliberations

The new Railway Operating Committee (see *The Railway Gazette* of April 30) has held several meetings already, and it is announced that two of the most important matters under consideration are the purchase of new rolling stock and equipment and the complete revision of the railway rates structure. In connection with rating, it has been stressed several times in different Government pronouncements that it is the intention to abolish differential tariffs as soon as possible.

Railways Special Commission

The Special Commission under the presidency of Sr. Miranda (see *The Railway Gazette* of April 30) recently nominated the engineers who are to supervise the building in Canada of 1,542 flat wagons for the former British-owned railways.

The Trade Promotion Institute has been authorised by the Commission to arrange for the immediate shipment of 35 goods locomotives built in England for the Central Argentine line.

The Commission has decided to study the advisability of purchasing the 178-km. country line between Corrientes and Mburucuyá. It was agreed further to recommend to the Executive that as from July 1 next, the parcel services at present carried out by the Post Office should be transferred to the railways.

Plans Approved for Zapala Line

The Argentine Government has issued a Decree through the Ministry of Public Works approving the preliminary plans prepared by the State Railways for the new line between Malargüe, Bardas Blancas, and Zapala (B.A.G.S.R.). The original scheme provided for a southern terminal at the latter point, or alternatively at Contralmirante Cordero (see *The Railway Gazette* of November 14, 1947).

New Buenos Aires Provincial Branch

In accordance with the three-year Public Works plan being put into practice by the Government of the Province, the Buenos Aires Provincial Railway has begun the construction of a new branch, 27.3 km. in length, between Azul and Teniente Coronel Miñana. The line will cost ps. 3,455,654, and it is hoped that it will be open to service before the end of this year. The new line will permit trains which previously terminated at Azul to run through to Olavarría, whereas at present traffic for the latter point leaves the Azul line at Ariel Junction. The 39 km. of line between Ariel and Teniente

Coronel Miñana will be removed later, and the engine shed at Azul will be merged with that at Olavarría.

INDIA & PAKISTAN

Help for Third Class Passengers

It was announced by the Minister of Transport during the debate on the railway budget that Indian railways have decided to invite the co-operation of social service organisations in easing the conditions of third class travel. The Minister said he believed very strongly that the travelling conditions of lower class passengers provided much scope for social service of the highest quality, and he had instructed railways to select people with the right training, right spirit, and the right aptitude to take up this work. The scheme had been put into force already on many Indian systems.

Collision near Karachi

Fifteen passengers were killed and 32 injured, 10 seriously, as a result of a collision on April 15 between the 36 down passenger train from Lahore and a goods train standing at Jungshahi Station, 50 miles north of Karachi. The casualties were brought to Karachi in the evening by a relief train. Two third class bogies in the front portion of the passenger train were telescoped, and a railway saloon, carrying a Special Railway Magistrate, was half-wrecked.

Inter-Dominion Service Plans

Mr. A. G. Hall, Director-General of Railways (Pakistan), and Lt.-Colonel D. McMullen, of the N.W.R., recently held discussions with the Chief Commissioner of Railways and other officers of the Railway Board (India), and reached agreement on matters relating to inter-Dominion traffic.

At the request of the Pakistan representatives, it was agreed to run an inter-Dominion passenger service between Delhi and Lahore from April 20, and between Bhatinda (E.P.R.) and Samasata (N.W.R.) from a date to be arranged between the two railways. Due to a last-minute hitch, however, the Delhi-Lahore service did not materialise on April 20.

Partition of Jodhpur Railway

At a meeting between officials of the Jodhpur Railway, the N.W.R., and the Pakistan Ministry of Communications, held recently in Karachi, it was decided that the N.W.R. will take over the Pakistan section of the Jodhpur Railway in Pakistan on June 1. The meeting was conducted in a friendly atmosphere, and agreements were reached regarding division of rolling stock and stores.

RHODESIA

New Signal Installation

A new electrically-controlled system for the operation of points and signals is being installed at the Bulawayo Station yard. The control panel will be of a new type adopted (it is understood) for use at Liverpool Street Station, London. The Signal Engineer of the Rhodesia Railways (Mr. E. W. Dennison) recently visited Great Britain by air.

Future of Beira Port

At a recent civic banquet, the Southern Rhodesia Minister of Mines & Public Works pledged continued support to Beira Port. The Minister said: "Beira is our natural outlet and, as long as it is developed to cater for our traffic, will remain our principal one, and will benefit accord-

ingly. Yet the future of Central Africa demands an outlet to the west. This is necessary both for development and for strategic purposes—but Beira need have no fear that it will be abandoned as long as it develops with the times. All the ports of Africa are likely to be needed in the next 50 years, for the development of this continent will gather momentum and all the old Colonial powers must take part in this development and co-operate with one another for the good of Africa and for the restoration of Europe."

SOUTH AFRICA

New Motive Power

Twenty steam and four electric locomotives arrived in the Union in January, all from the United Kingdom; and a further six were shipped. Six Class "15F" main-line locomotives were placed in service during March, and two Class "3E" electric locomotives.

Cape Eastern Main Line

Work on the Cape Eastern main line, inland from East London, has reached the stage where the most difficult section between the port and Queenstown, a distance of 153 miles, is nearing completion rapidly. The deviations carried out on this section have eliminated 63 complete circles of curvature.

Although work on the regrading and relocation of this line was begun before the war, little progress was made during the war period. The Amabele-Dohne section was opened in August, 1942, but it was not until five years later that the next section, between Waku and Tylden, could be opened for traffic (see *The Railway Gazette* of November 21, 1947). The work involved extensive deviations, new

bridges, embankments, and culverts, and includes 13 tunnels, one of which, at Hobbs Hill, is about 3,200 ft. in length.

The total cost of reconstructing the entire section from East London to Queenstown is approximately £3,400,000, of which £2,700,000 is for the 88 miles between Amabele and Imvani. A further £1,550,000 has been set aside for the section between Queenstown and Springfontein.

EGYPT

Developments at Cairo Station

To cope with increasing traffic at Cairo, a tunnel is being constructed under the main line northwards, which will connect the marshalling yard in the north with the main line to the south, thus diverting traffic from Cairo Station. The station itself has been enlarged by the recent completion of a three-storey block in addition to the main building. An additional platform is under construction on the west side of the station. These developments give the station, considered in conjunction with the adjacent suburban Pont Lemoun Station, a claim to be the largest in the Middle East.

ITALY

Wagons-Lits Services Extended

Sleeping and dining car services of the International Sleeping Car Company in Italy have been extended to second class passengers since the middle of March last. From the end of the war until that date, berths had been reserved only for first class passengers. First class passengers are now entitled to single-berth compartments, while two-berth compartments are available for second class passengers.

There are only four single-berth compartments in each sleeping car in Italy. Similarly, restaurant car facilities had been provided only for first class passengers in the post-war period up to mid-March, but are now open to second class passengers without any time limit except that imposed by subsequent meal sittings. Third class passengers, also, are admitted now, but only for the time required to take meals or refreshments. A fixed-price meal in a restaurant car costs 600 lire (approximately 8s.) exclusive of beverages and tips.

PORTUGAL

Order for Lightweight Coaches

An order for 60 all-steel lightweight coaches was placed recently by the Portuguese State Railways with the Schindler Waggonfabrik A.G., of Pratteln (near Basle). The order is said to have been secured in the face of severe competition from builders of various countries.

FRANCE

Consolidating Railway Loans

The French Government is pushing forward a plan for regrouping 22 categories of loans of the former railway companies, and consolidating them in three new issues, the whole operation covering a nominal capital of fr. 37,000 million. The three new S.N.C.F. issues will be in obligations of fr. 5,000 nominal value, bearing interest at 5, 4, and 3 per cent. respectively, similar to the old loans of the 1921 class. The old obligations were in much smaller denominations, and the raising of the amount to fr. 5,000, together with the consolidation in three issues, will ease greatly the accountancy complications involved in the payment of the smaller coupons.

Publications Received

British Transport Commission: Transport Statistics. 1948 Series. Number 1. Period to January 25. London. British Transport Commission, 55, Broadway, Westminster, S.W.1. Price 1s.—These tables correspond to the monthly statistics of traffic and operating results published by the Ministry of Transport before the war. In a foreword, Sir Cyril Hurcomb writes that the object of the new returns is to make available at the earliest possible date, and in reasonable detail, particulars of the main activities carried on by the Commission, in order that those interested, including staff of all grades, may be enabled to form some judgment of the scope and nature of the work performed and the efficiency with which it is being done. The tables will be issued at four-weekly intervals. In the case of British Railways, they are confined to receipts from railway working alone, excluding road transport, catering services, steamships, and so on.

The Railways of Britain: Past and Present. By O. S. Nock. London: B. T. Batsford Limited, 15, North Audley Street, W.1. 8½ in. × 5½ in. 120 pp. Illustrated. Price 15s.—The present is an appropriate time for a volume on railways to join the well-known series of Batsford books dealing with features of the English scene. Although railway enthusiasts' memories are long, that of the public is short, and in the face of the specialised information services associated with nationalised undertakings it may well be that in time some people will be persuaded

that British railway history began on January 1, 1948.

Mr. Nock covers a wide field of railway history and operation, illuminating his pages frequently in his characteristic style from personal experiences both on the footplate and elsewhere. In the mass of information and anecdote presented in these pages, nearly every reader is bound to find some aspect of railways in Great Britain which appeals to him as a subject for more detailed study. The illustrations are of the high quality which has long been associated with Batsford publications, and are chosen from present-day and historical subjects. We hope to deal with this book in more detail later.

Packaging and Display Encyclopædia. Edited by E. Molloy and James H. Boot (Associate Editor). London, 1948: George Newnes Limited. 11 in. × 8 in. 880 pp. Illustrated. Price 3 gns.—This massive and lavishly produced volume will be regarded as a work of reference on both the technique and the art of packaging. Its 49 contributors, representing every industry connected with packaging, ensure a comprehensive coverage of the subject. Their articles are supplemented by advertisements, and directories of associations, trade names, and firms, classified alphabetically and according to product. A concise and informative chapter on "Packaging and Despatch for Rail Transport" is contributed by Mr. W. H. Vine, A.M.Inst.T., Assistant London District Goods Manager (Commercial), L.M.R., who abstracts conditions of carriage and other regulations, summarises services

given by the railways and adds useful advice on packing, labelling, and consigning. His article compares well with one or two other contributions which suffer from repetition and over-emphasis. When we read the biography of one contributor who early in life acquired a "reverent admiration" for the "very adventurous field of advertising" over-emphasis as a description verges on understatement.

Precision Grinding Machines.—Illustrated particulars of the complete range of Churchill precision grinding machines are given in a new booklet issued by the Churchill Machine Tool Co. Ltd. The book is divided into eight sections, with a thumb index. Section 5, dealing with grinding machines for railways, includes axle journal, crankpin, radius link, piston rod, and various other types of grinding machinery.

Colmo Creep-Resisting Steel.—Progress made in many branches of engineering in the past 50 years has been due largely to the availability of steels able to withstand relatively high stresses at increased working temperatures. This has been possible only as a result of much research and tests over long periods. In this work, Colvilles Limited, Glasgow, took a leading part, and a recent brochure issued by this firm discusses the effects of stress on steel at high temperatures, describes the equipment used for creep testing, and outlines the method of obtaining reliable creep data. In conclusion, the composition, properties, and working stress data of Colmo steels are recorded in a convenient form.

Restoring Railway Services after a Major Accident

Traffic working and diversions in connection with the collision at Winsford, London Midland Region

ALTHOUGH the immediate tragic circumstances of any major railway accident inevitably command widespread public attention, the arrangements made by the railway authorities for the provision of temporary local services, and for the diversion of other traffic whilst the line is being cleared, are often in themselves of great technical interest, and sometimes afford noteworthy examples of re-routing and effective improvisation.

The principal features requiring action after a major accident had occurred and local action has been taken to protect the line, such as notifying the District Operating Manager's Control Room, calling out the breakdown gangs and officials concerned, and so on, are:—

- 1.—Evacuation of casualties and uninjured passengers, and of undamaged mails, luggage, etc.
- 2.—Disposal of any other trains which, whilst not involved in the accident, may have proceeded past the nearest points at which they could have been diverted from the obstructed route.
- 3.—Diversion or suspension of other long-distance trains which have not yet passed beyond the last available points of divergence.
- 4.—Provision of temporary local services between the stations affected.
- 5.—Following clearance of the line, all services to be got back to normal as quickly as possible.

By reason of its occurring on one of the busiest main lines in the country, and within 8 miles of Crewe, which is one of the largest centres of railway traffic convergence, the recent collision at Winsford (Cheshire) involved consequential operating problems of considerable magnitude and interest. We are indebted to Mr. S. H. Fisher, C.V.O., Chief Operating Manager of the London Midland Region, for the information on which the following article, describing how these problems were dealt with, has been based. We believe that this is the first case for many years in which the full story of such a situation has been made available. The location of the accident, also the relevant adjacent routes which were used for subsequent diversions of traffic, are shown on the sketch map on page 572.

At approximately 12.27 a.m. on Saturday, April 17, whilst the 5.40 p.m. (of April 16) express passenger train from Glasgow to Euston was standing in mid-section between Winsford Junction and Winsford Station, it was run into in rear by the 6.25 p.m. (of April 16) postal train from Glasgow to Euston. As will be seen from the map on page 572, the scene of the accident is about half-way between Crewe and Weaver Junction, a 16½-mile stretch of the main line which carries all traffic from Crewe in the Liverpool and Carlisle directions. Between Crewe and Weaver Junction is partly four-track and partly double-track, but at the scene of the collision only two tracks are available; both of these were blocked, thus limiting the access for breakdown operations. Winsford is in the Crewe District Operating Manager's area, that of the Liverpool D.O.M. beginning at Acton Grange Junction, 15 miles distant on the line to Warrington, and at Birdswood, 10 miles distant on the line to Liverpool, respectively.

The collision was very destructive, and of the 10 vehicles of the passenger train, only 5 were in a fit state to be taken for-

ward without attention, while of the 13 vehicles comprising the postal train, 8 were fit to be drawn back.

Owing to the collision occurring in mid-section, some few minutes elapsed before information could be given by the trainmen to the signalmen, and in turn to the District Operating Manager's Control Room, Crewe, which was advised at 12.45 a.m. The latter immediately notified adjacent District Operating Managers' Control Rooms and the Divisional Operating Manager's Control Office, Crewe. The Divisional Operating Manager (Mr. W. B. Shelton) and his Assistant (Mr. A. J. D. Thomas) were at once advised, the latter accompanying the District Operating Manager (Mr. T. P. Strafford) by road to the scene of the accident almost immediately. The Crewe breakdown train was called out at 12.45 a.m., and the Edge Hill (Liverpool) breakdown train at 1.25 a.m.

Casualty Evacuation

A special feature of this accident was the promptitude with which assistance was obtained from the police, medical, and fire services. Immediately Crewe Control received news of the accident, the Northwich postal telephone exchange was requested to radiate a general call for doctors and ambulances and to notify all local hospitals; the County Police also were notified direct at 12.55 a.m. The first doctor arrived at 1.15 a.m.; between 1.30 a.m. and 2 a.m., six other doctors arrived; while within an hour of the collision, 30 police officers, including the Chief Constable of the Cheshire Constabulary, were on the scene. The N.F.S. also was very quick in its turn-out, several appliances and 39 men in charge of the Chief Fire Officer being on the spot within a short time.

The first casualties reached Winsford Memorial Hospital at 1.30 a.m., and all the injured were taken to this and neighbouring hospitals very quickly.

At 2.50 a.m., the leading five vehicles of the 5.40 p.m. train from Glasgow were worked forward specially to Crewe, where they arrived at 3.12 a.m. with some 200 to 300 uninjured passengers, and some who were slightly hurt. Special arrangements had been made for their reception, three doctors being in attendance on arrival of the train, and refreshment being provided. Subsequently, unclaimed luggage and personal effects recovered were conveyed to Crewe by road for sorting and disposal.

Planning Traffic Diversions

While the work of rescue was going on and the first steps were being taken to clear the line, prompt alternative measures were being taken for working the large amount of traffic normally passing over this busy route with minimum practicable delay. At a first appreciation, the total blockage of the line was expected to last for 24 hr., but in the event, thanks to the strenuous effort of the men on the spot, normal working (with a speed restriction) was resumed within 20 hr. after the accident.

At the time of the collision, there were two trains on the down line and six on the up line, which respectively had passed Crewe and Halton Junction or Warrington—the last points at which diversion could have been effected. The disposal of these eight trains will be dealt with later, but as soon as the mishap was notified the Crewe and Liverpool District controls

took steps to prevent any more trains passing Crewe and Halton Junction or Warrington respectively.

Meanwhile, at divisional level, the Divisional Operating Manager's Control at Crewe had notified the Midland (Derby) and Central (Manchester) divisional controls within half-an-hour of the mishap, and from that time onwards the various divisional controls were in continuous contact with one another (and each in turn with its respective district operating managers' controls) in order to arrange re-routing or holding-back of long-distance freight trains which normally would pass through the affected area. (Diversion of passenger trains was arranged wholly within the Western Divisional organisation.)

The speed and effectiveness with which these diversions were carried out emphasise, in fact, the value of the extensive control system of the former L.M.S.R., the reorganisation of which was nearing completion when the nationalisation of railways took effect.

Problems of Engine and Manpower

The main problem inherent in large-scale diversions of traffic is twofold; first, whether all the types of locomotives normally working the diverted trains are permissible over the alternative routes; and secondly, how many of the trainmen will be qualified to work over the routes over which their trains are being diverted. Subject, therefore, to adequate line capacity being available, the operating authorities naturally prefer to keep the traffic to as few alternative routes as possible, and in this instance only two main diversions (*via* Chester and *via* Manchester) were used, in preference to the nearest available alternative (*via* Hartford Junction, Northwich, C.L.C., and Sandbach); over this last-named local connection there is, in fact, a serious engine restriction as well as difficulty in supplying conductors, and other limitations including a reversal.

On this occasion the policy of the former L.M.S.R. in extending route-availability of engines to the maximum economic degree appears to have been vindicated, notably by the fact that in only one instance was one of the booked engines working a diverted train of a type which restricted its use over the proposed alternative route, thus requiring the provision of a substitute engine. The train concerned was the 10.30 p.m. (April 16) Glasgow to Euston, which was being worked by one of the few 4-6-2 locomotives from which the streamline casing has not yet been removed, which factor prohibits it from travelling *via* Manchester.

At so large a centre as Crewe, whence trainmen normally work over a wide radius, there was fortunately no difficulty in finding an adequate number of enginemen and guards qualified to work over the alternative routes as conductors or otherwise; although men were called out for this purpose as a routine measure, others reported voluntarily for duty on hearing of the accident.

A minor problem involved in working *via* Chester is that reversal is involved there in the case of trains between Crewe and Warrington, but this was dealt with by keeping a "turnover" engine ready instead of holding trains while their engines were turned.

The Alternative Routes

Details and distances of the two principal alternative routes which were used within the immediate Western Divisional area are:—

- 1.—*Via* Crewe-Chester (reverse) Frodsham Junction, and thence *via* Halton

Junction (for Liverpool) or via Warrington (for Preston and the North). Distance, Crewe-Wigan 51 miles, compared with 35½ miles Crewe-Wigan via Winsford. This route had to be used by all passenger trains booked to call at Warrington.

2.—Via Crewe-Manchester (London Road Junction) M.S.J. & A. Section-Ord-sall Lane-Eccles Junction-Tyldesley-Wigan. Distance, 49 miles.

Extensive use was made of both routes for long-distance passenger services while the lines were blocked, the numbers of trains so diverted being:—

Via Chester : Up trains ... 26
Down 25—Total 51 trains
Via Manchester : Up trains ... 15
Down 10—Total 25 trains

Total number of main-line trains diverted, 76

Delays arising from these diversions averaged 1½ hr. per train.

Local passenger traffic was catered for by a rail-motor service (using a rail-motor based on Warrington) between Warrington and Hartford, and by special bus services between Crewe and Hartford, and Hartford and Runcorn.

Due to there being generally less need

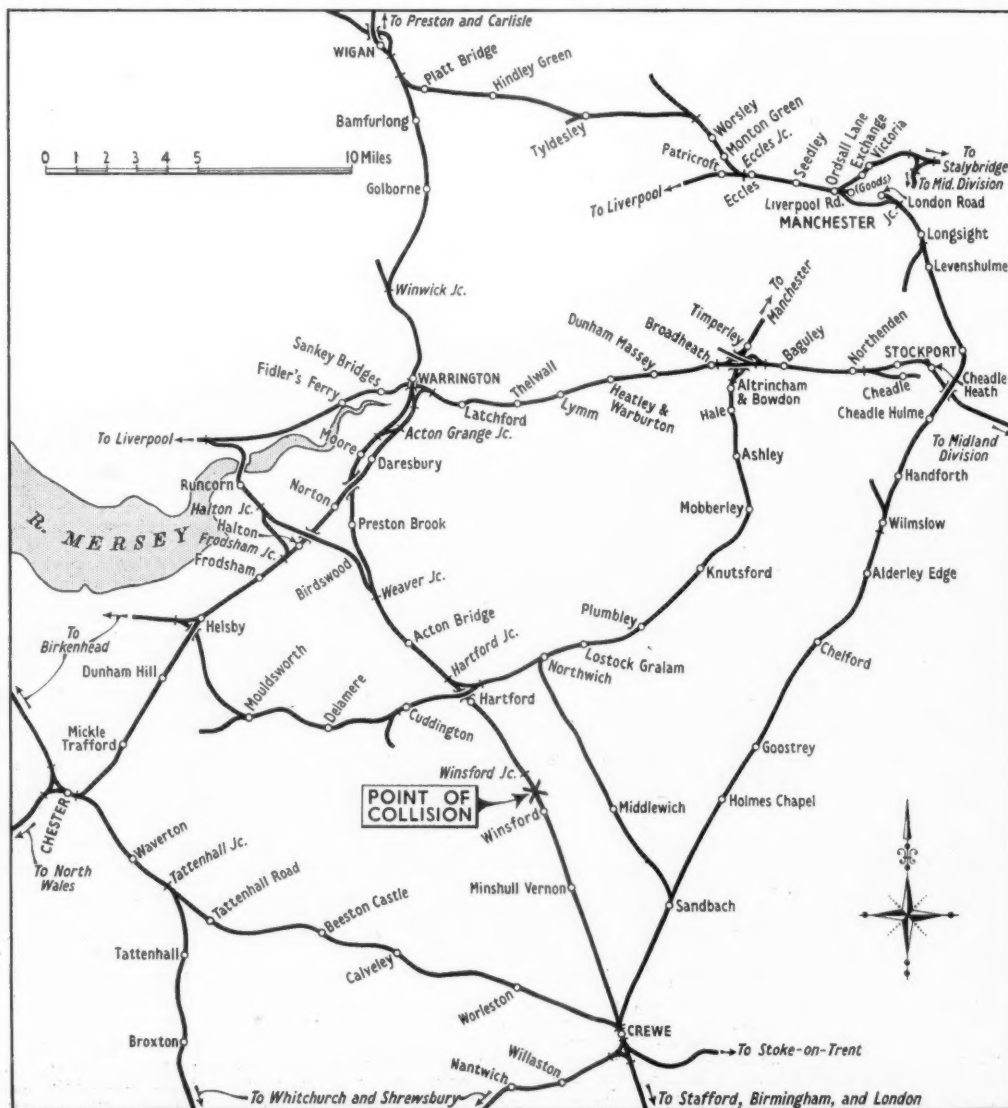
for stops to take up or put off traffic at intermediate points, a wider range of alternative routes could be used for the diversion of freight services. The use to some extent of routes other than those already required for the diversion of passenger traffic also helped to keep clear the two routes primarily required for the latter. Among examples of unusual routes over which freight trains were diverted were:—

Train running between	Diverted via
Carlisle—Bushbury (Wolverhampton)	Tebay, Ingleton, thence Midland Division & Wichnor Junction
Carlisle—Willesden	Tebay, Ingleton, thence Midland Division to Market Harborough, Northampton
Carlisle—Nuneaton	Midland Division, Burton-on-Trent, Shackerstone
Garston—Willesden	Manchester Exchange, Manchester (Midland Junction), Market Harborough, Northampton
Liverpool—Rugby	Warrington Low Level, Broadheath, C.L.C., Cheadle, Cheadle Heath, thence Midland Division
Hooton—Nuneaton	Chester, Whitchurch, Shrewsbury, Stafford

Of the eight trains already mentioned as being between Crewe and Halton Junction or Warrington when the collision occurred, the two on the down line were the 8.30 p.m. West Coast Postal train from Euston, and the 12.1 a.m. parcels, Crewe to Preston. The former had reached Winsford station already at the time of the accident; it was in due course returned to Crewe and diverted via Manchester and Wigan. The parcels train had reached Minshull Vernon, and on being brought back to Crewe was sent forward via Chester and Warrington.

On the up line the situation was more complex, as there were six trains south of Halton Junction or Warrington, some of them being freight trains which were already in loops or sidings. The only two express passenger trains were the 11.45 p.m. Liverpool Lime Street to Crewe, which had reached Winsford Junction; and the 12.15 a.m. Liverpool Lime Street to Euston, which had reached Hartford Junction.

Both these trains were returned to Halton Junction and continued their jour-



Routes over which trains were diverted after the accident at Winsford on April 17

neys thence via Chester and Crewe. Of the four freight trains, three were stabled at Weaver Junction, Birdwood, and Winsford Junction respectively, and their engines sent to shed; the fourth (11.20 express freight, Edge Hill to Nottingham) was diverted over the connection from Hartford Junction on to the C.L.C. (Chester, Northwich, and Altrincham line) as far as Northwich, and thence over the L.M.R. Northwich branch to the Crewe-Manchester main line at Sandbach. For reasons already explained, this was the only train to be diverted over this route.

Clearance of the Line

As already stated, the breakdown trains from Crewe and Edge Hill had been called out promptly (the former at 12.45 a.m. and the latter at 1.25 a.m.), and they arrived on the scene at 2.20 a.m. and 4.29 a.m. respectively. This was quick work considering that the Crewe train had to be remarshalled in order to have the crane working from the north end. The Newton Heath breakdown train also was ordered to be in attendance at 12 noon on Saturday, April 17, for the purpose of assisting the Crewe train to lift the engine (No. 6251, 4-6-2 type) of the postal train, which was derailed all wheels of the engine and tender, and was leaning over towards the down line.

Arrangements were made meanwhile for getting to the site the material required for the repair of the permanent way (90 yd. of which had to be completely relaid) as soon as the track should be clear. Altogether some 250 men were employed on the clearance and relaying of the line.

Apart from the five leading vehicles of the 5.40 p.m. from Glasgow, which had been worked forward already to Crewe, three others were taken forward after being put in sufficient condition to be moved, the remainder being cleared to the

lineside as wreckage. Of the 13 vehicles of the postal train, the rear eight were drawn back and worked specially to Liverpool Lime Street, as being the most convenient point; and the remainder were cleared to local sidings or disposed of as debris.

By 12.30 p.m. the whole of the coaching stock involved in the accident had been accounted for, and at 12.50 p.m. the engine tender was re-railed. The engine itself was re-railed two hours later, while by 6.20 p.m. the up line track had been relaid ready for traffic, subject to a 15-m.p.h. speed restriction which remained in force until 4 p.m. on April 19.

Normal working was restored over the down line at 7.45 p.m. on April 17 (19½ hr. after the collision), and over the up line (subject to the temporary speed restriction) at 8.20 p.m. The first trains to pass over were the 3.45 p.m. express Euston to Liverpool on the down line, and the 7.5 p.m. express Liverpool to Birmingham on the up.

Freight services via the main line were reinstated, commencing with the 8.30 p.m. Crewe to Carlisle and the 8.10 p.m. Edge Hill to Birmingham, while arrangements were made for those freight trains which had been stabled or held back at starting points to be cleared on Sunday, April 18.

By 6 a.m. on Monday, April 19, the whole of the arrears had been cleared.

Disposal of Mails

Letter mails from the damaged vehicles were taken over by G.P.O. officials on the scene of the mishap, and disposed of under G.P.O. arrangements. The parcels mail from the damaged vehicles was conveyed by road to Crewe on the afternoon of the accident, sorted there by railway staff, and despatched on the first available services.

Similar arrangements were made in disposing of the mails loaded in the eight

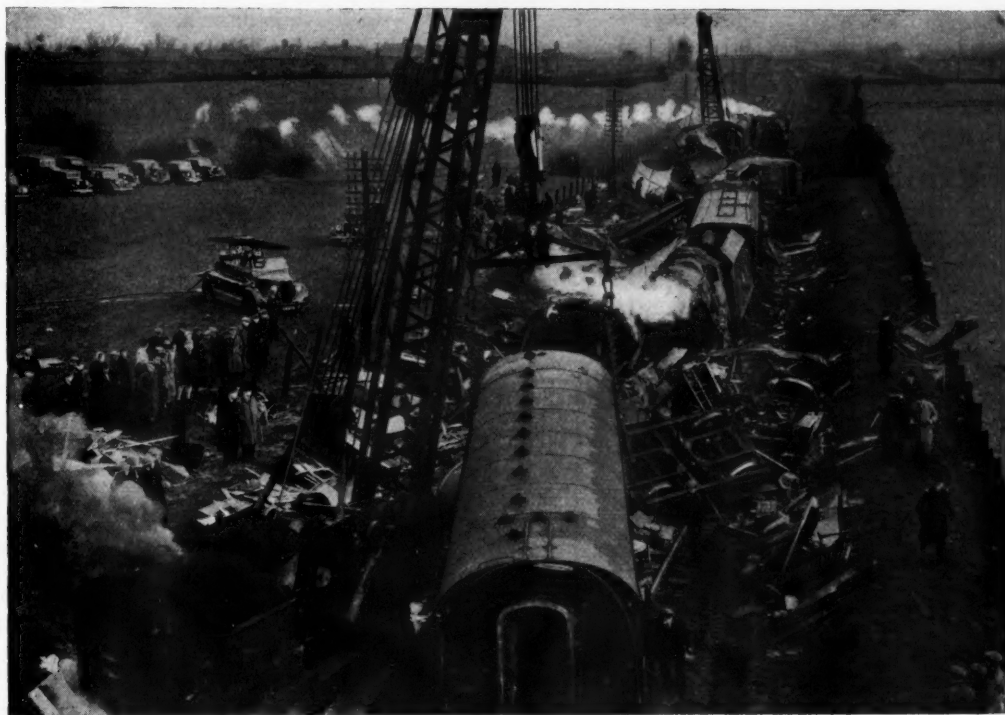
vehicles of the postal train taken to Liverpool, the letter mail being taken over there by the Post Office authorities whilst the parcels post was sorted and forwarded by railway staff.

Spare vehicles stationed at Willesden were used to form the 8.30 p.m. down West Coast Postal from Euston on Saturday night (April 17) in lieu of the normal balancing vehicles, which were not available, as they had been involved in the accident.

Conclusion

The foregoing affords a comprehensive survey of the arrangements involved in restoring the situation after a serious accident. Apart from the careful planning and rapid communications which are essential to the achievement of a rapid return to normal, however, the work done on this occasion both in the clearance of the line and in the maintenance of services by alternative means would not have been so swiftly nor so effectively performed had it not been for the splendid spirit shown by all grades of railway staff. This was typified by the action of Driver John Howie and Fireman W. Miller, of the Polmadie Depot (Scottish Region), who were the enginemen of the postal train. Although they had been severely shaken in the collision, when they had been brought to Crewe by road some four hours after the accident they volunteered to work their return train if required.

EAST INDIAN RAILWAY COMPANY.—It was notified recently that on March 31, 1948, a total sum of £10,010,490 5s. 6d. was invested for the purpose of providing a sinking fund in respect of the annuities class "B," a sum of £2,260,093 16s. 9d. was invested to provide a sinking fund in respect of annuities class "C," and a sum of £4,293,563 5s. 6d. to provide a sinking fund in respect of annuities class "D."



Breakdown cranes at work after the collision at Winsford, London Midland Region, on April 17

All-Steel Bodies for Railway Coaching Stock, G.I.P.R.

*Speed of fabrication and erection increased
by the folded-plate method of construction*

*By C. W. Clarke, M.I.C.E., M.I.Mech.E., M.I.Loco.E.,
Chief Mechanical Engineer, Great Indian Peninsula Railway*

AT the end of the war, most railways in India were faced with a heavy building programme, and in particular for the rapid production of third class passenger coaches. To meet this demand, the Great Indian Peninsula Railway prepared a design in which, with the exception of the angle section roof carlines and tee section cantrails, all sections for the body frame members are fabricated from $\frac{1}{4}$ -in. steel sheets.

Neither the railway workshops, nor any firm in Western India, possessed large presses for forming curved body side pillars, but fortunately one firm possessed a battery of five 240-ton press brakes capable of folding plates up to a maximum of 12 ft. length. It was decided, therefore, to adopt folded-plate sections throughout, but no section to be longer than 12 ft. The chief advantage of the folded-plate type of

construction is speed of fabrication and erection.

It should be appreciated that in India standard underframes are supplied to the Government railways, so that any question of adopting a stressed-skin type of construction in which the underframe and body form an integral unit could not be entertained. The only alternative, therefore, was to accept the standard underframes supplied, and to design a lightweight type of all-metal body which permitted unit sections to be manufactured by outside firms for supply to the railway workshops, so that the units could be assembled easily when received.

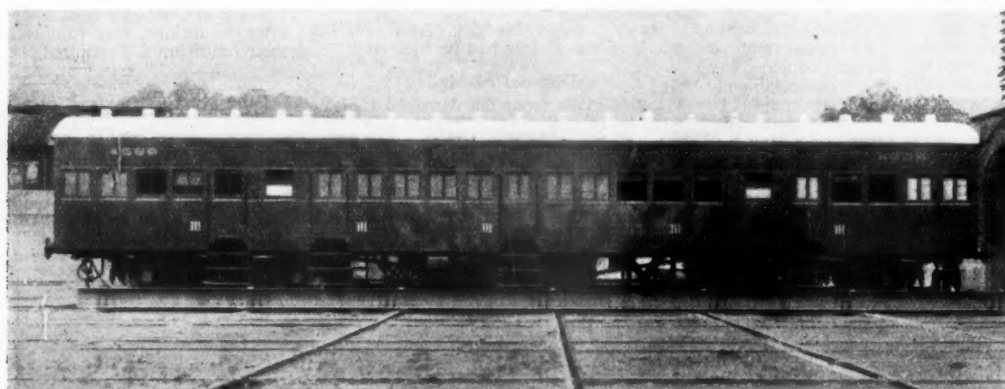
An important factor taken into consideration was the reduction of fire hazards. The G.I.P.R. had been unfortunate in that it had sustained a loss of 17 coaches during 1946 as a result of fires.

Fires may occur in passenger trains as a result of sparks and cinders from the locomotive setting light to a coach by lodging on inflammable material on the coach roof, between gaping panels in older-type coaches fitted with wooden end-panels, or on the underframe cross-members just below the coach floor boards, setting light to the wooden flooring of the coach body.

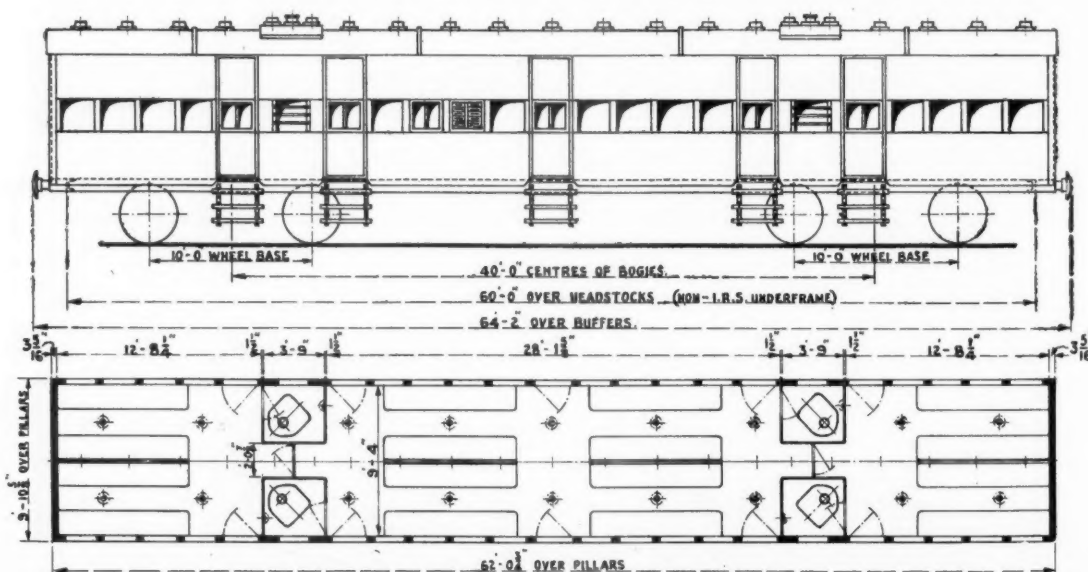
It was decided, therefore, to adopt an all-metal roof construction and a special type of floor using re-inforced Indocrete slabs. Indocrete is a proprietary composition made from hessian, cement, and other special compounds, and it is fire-resistant even to the concentrated flame of a blow-lamp. It was selected for its fire-resistant feature, because it reduced the load on the saw mill, and also because the timber supply position was rather acute.

The drawings show details of the design developed, and the photographs reproduced on page 577 show how easy it is to assemble the panel and roof units received from the contractors.

There is a number of features in the design which merit special attention. In the first place, roof hatches have been provided to facilitate the easy removal of the overhead water tanks when the coaches pass through shops for periodic overhauls.

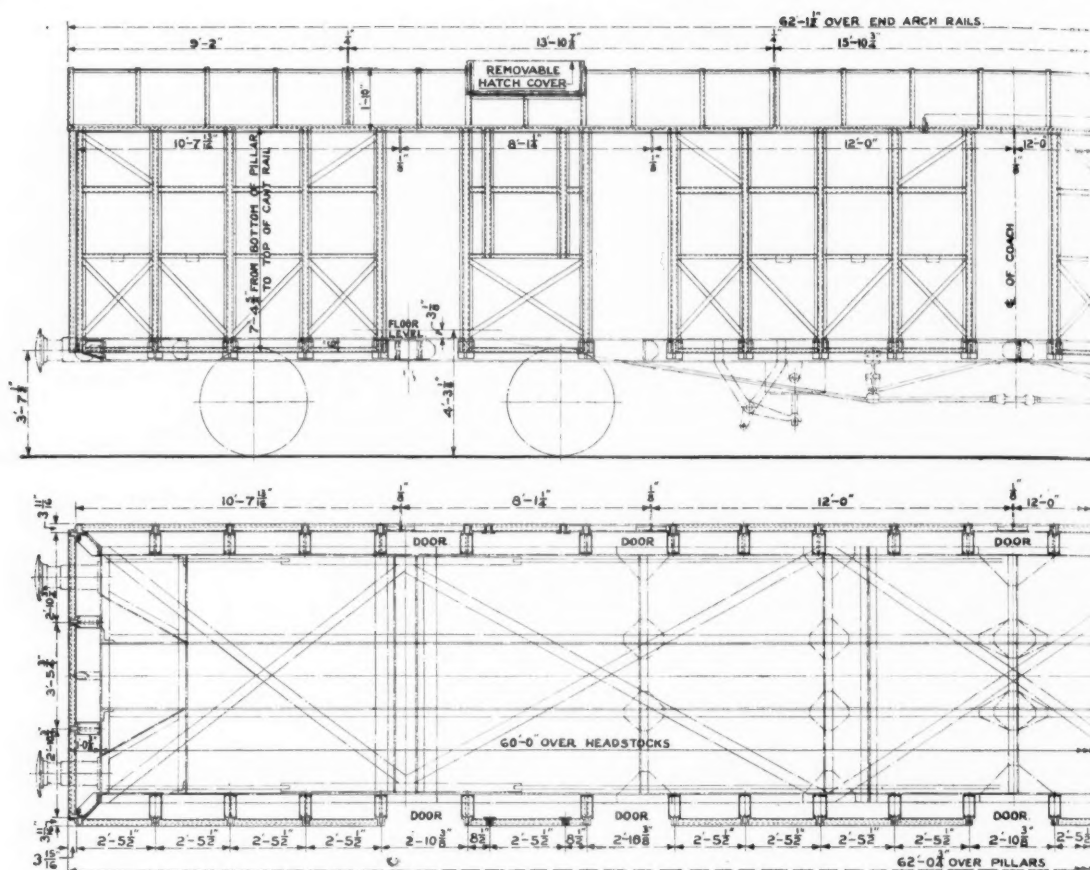


Third class railway coach, G.I.P.R., fabricated from steel sheets



Dimensions and seating arrangement of third class railway coach

Sectional diagrams showing method of laying flooring, and other constructional details



Framework of coach showing removable hatch cover

It was found in previous designs that overhead water tanks had to be removed for attention each time a coach passed through shops for periodical overhaul every three years, and this meant dismantling the partitions, which is quite a major operation. The provision of roof hatches avoids the necessity of dismantling coach partitions.

The special form of floor slabs adopted facilitates rapid building, and so far has permitted an output of two coaches a week, with the possibility of stepping up to five coaches a week once the staff has obtained experience with this form of construction. The electrical cables are carried in the roof just above the cantrails, and a steel panel cover-plate, which is easily removed, facilitates inspection of electrical cables.

The prefabricated body side and roof units are of all-welded construction with

the panel plates and roof sheets riveted to the body frame members. All panel units and roof sections are jig-welded, and the contractors are permitted an overall tolerance of *plus or minus* $\frac{1}{16}$ in. on each unit section. The door pillars are wooden members, and any discrepancy is taken up in the thickness of these pillars. The doors are of all-steel construction and jig-welded.

The panel units are connected at the cantrail by channel sections. To ensure adequate stiffness, the roof unit sections are so constructed that the roof joints do not come opposite the joints on the cantrails, but overlap, thereby ensuring a rigid body framing.

Particulars of weights of the all-steel coaches, compared with a similar type of coach with wooden bodies, are given in

the following table. The all-steel coaches have Indocrete floors, whereas the coaches with wooden bodies have wooden floors, a feature in design which means an increase of 1 ton 12 cwt. 1 qr. in the tare weight.

WEIGHT OF THIRD CLASS COACH ON 60-FT. UNDERFRAME
(Folded-Plate Construction)

	Tons Cwt. Qr.		
Underframe with bogies complete	20	4	0
After erecting steel body frame-work with exterior panels and roof sheet (including the weight of 10 doors)	24	18	1
After fixing the Indocrete flooring	28	0	0
After fitting interior casing	34	1	2
After laying flooring composition and latrine pans	35	12	2
Complete coach, with seats and bunks (Tare)	37	15	0
Similar coach with wooden body (Tare)	34	17	0

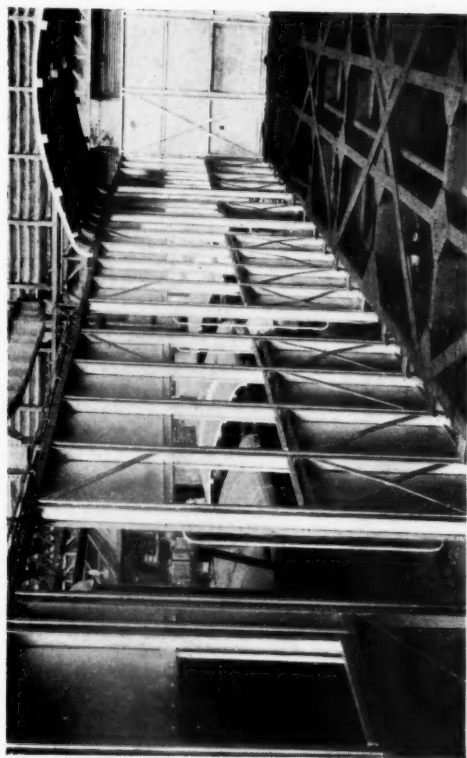
B.E.A.M.A. ANNUAL MEETING.—Mr. E. C. Holroyde, Vice-Chairman of the Council of the British Electrical & Allied Manufacturers' Association, presided at the general meeting on April 15. Discussing the importance of electrical equipment to the export drive, he said that selling efforts as well as the quality of production would need to be of the highest order if the sale overseas of a large part of the output of the industry was to be maintained. Mr. Holroyde recalled the active part taken by the Council of the association in formulating the proposals on the subject of prices and profits which were put forward by the F.B.I. to the Chan-

cellor of the Exchequer. Emphasis had been laid on the fundamental necessity of a greater number of goods being produced each week by the same number of people during the period of economic recovery. The Chairman stated that very friendly relations had been established during the year between the association and members of the board of the British Electricity Authority.

PARIS METROPOLITAN STRIKE ENDED.—The Paris Metropolitan Railway motormen who had been on strike since May 2 (see our May 7 issue) resumed work at 4 p.m. on May 6.

CALENDAR OF EVENTS FOR OVERSEAS TOURISTS.—Every visitor to Great Britain this year will receive a booklet, small enough to fit into a waistcoat pocket, giving the principal events in Great Britain and Northern Ireland, together with a very comprehensive supplement of general tourist information. Well over 1,000,000 copies of this booklet, printed in English, French, and Spanish, will be sent overseas for distribution through travel agencies, airway and steamship offices, etc., and they represent the latest addition to the wide range of literature of the British Travel Association, Tourist Division of the British Tourist & Holidays Board.

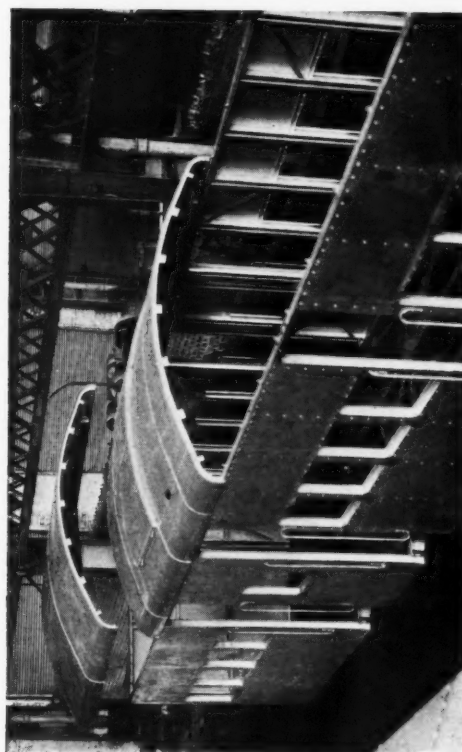
All-Steel Bodies for Railway Coaching Stock, G.I.P.R.



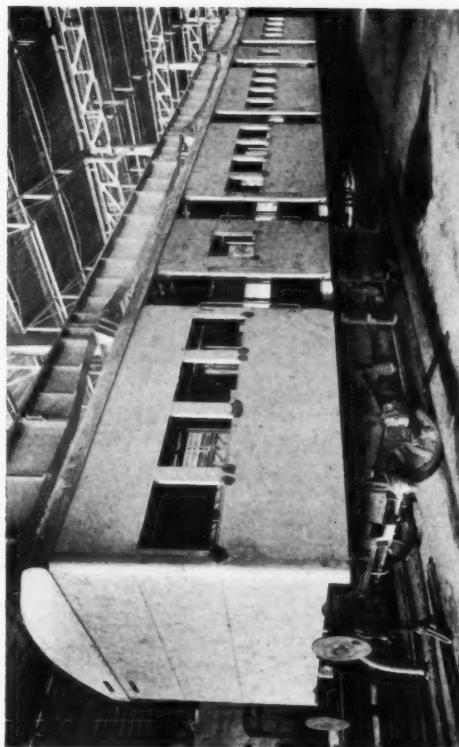
Erection of side framing



Interior view of coach framework

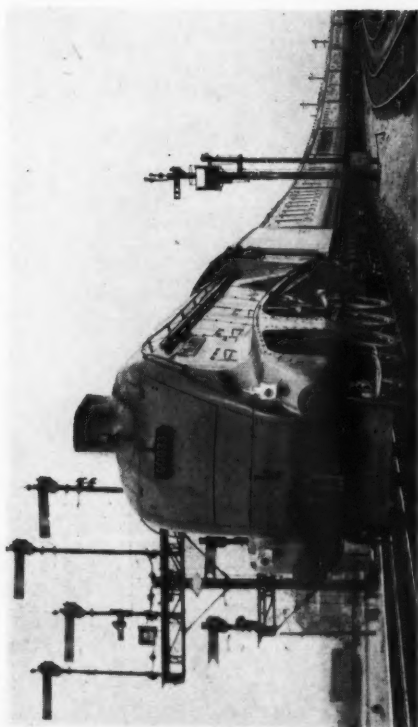


Lowering the all-metal roof into position



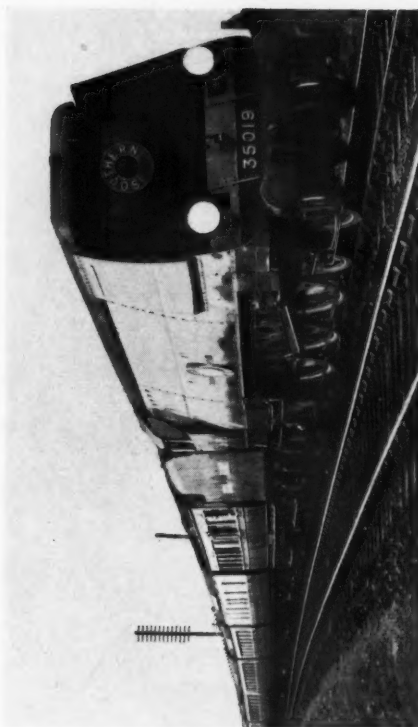
Framework of coach complete

Locomotive Exchanges on the Western Region



Ex-L.N.E.R. Pacific "Seagull," with new numbering, leaving Reading with the 1.30 p.m. Paddington—Plymouth on April 28

Photos



Southern "Merchant Navy" Pacific, "French Line, C.G.T." renumbered 35019, near Reading with the 8.30 a.m. from Plymouth on April 28

Mr. W. Earley



The 1.30 p.m. from Paddington passing Cullompton on April 27 behind the ex-L.N.E.R. Pacific "Mallard"

Photo

Mr. J. Cross

RAILWAY NEWS SECTION

PERSONAL

Mr. T. E. Maloney, hitherto General Manager, South Eastern Division, Queensland Government Railways, has succeeded Mr. P. R. T. Wills, who has retired, as Commissioner for Railways, Queensland.

Mr. A. G. Hall, Director-General of Railways, Pakistan, is proceeding on leave this month, pending retirement. Mr. D. M. Hambly, Director, Civil Engineering, Railway Department, Pakistan, also is leaving the service in June.

Mr. W. G. W. Reid, General Manager, Madras & Southern Mahratta Railway, has been granted leave out of India, and Mr. B. B. Varma, Officer on Special Duty (Re-grouping), Railway Board, has assumed charge of the office of General Manager.

Mr. H. M. Lattimer, District Superintendent, Sunderland, North Eastern Region, British Railways, has been appointed District Superintendent, York.

Mr. E. H. Ball has been appointed to the board of the Metropolitan-Vickers Electrical Co. Ltd.

Sir Johnstone Wright has been appointed a Director of British Insulated Callender's Cables Limited.

Mr. W. R. Cormack has been appointed Traffic Manager to Bryant & May Limited, in place of Mr. C. F. King, who has been appointed Assistant Secretary to the company.

Mr. E. J. Roney has been appointed a Director of Ransome & Marles Bearing Co. Ltd.

Mr. G. M. Booth, Chairman, and Colonel C. O. H. Bury and Mr. Charles Good, Directors, of the San Paulo (Brazilian) Railway Co. Ltd., are paying a short visit to San Paulo.

Mr. Frederick H. Norton, who joined the company in 1945 as an Assistant Vice-President in the Sales Department, has been appointed Vice-President in charge of all sales for the American Car & Foundry Company, succeeding Mr. R. A. Williams, who has resigned to accept the Presidency of the Standard Railway Equipment Manufacturing Company.

Mr. T. Waterhouse, Chairman, Trade Testing Panel, Assam & West Bengal, has been appointed Neutral Chairman of the Railway Workers Classification Tribunal set up by the Government of India to classify railway servants into grades for the purpose of fixation of their salaries in accordance with the recommendations of the Central Pay Commission. Mr. Waterhouse has been selected by the All-India Railwaymen's Federation from a panel of four names suggested by the Ministry of Labour. The Federation is represented on the tribunal by Mr. Khedgikar.

Major-General Sir Donald J. McMullen, K.B.E., C.B., D.S.O., M.I.Mech.E., Deputy Chief (Executive), Transport Division, Control Commission for Germany (British Element), since October, 1945, reaches the age limit for his rank in July, and is now in the United Kingdom on leave pending retirement from the Army. He was commissioned in the Royal Engineers in 1911, and, after attending the School of Military Engineering, took a mechanical course on



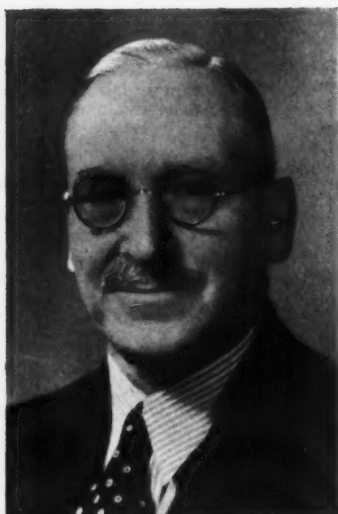
Major-General Sir Donald McMullen

Deputy Chief (Executive), Transport Division, C.C.G. (British Element), 1945-48; Director of Transportation, War Office, 1940-45

the Great Northern Railway under Sir Nigel Gresley. From August, 1914, to September, 1915, he served in the War Office, and thereafter with railway troops in the Middle East. From 1917 to January, 1920, he was Locomotive Superintendent to the Palestine Military Railways; he was awarded the D.S.O. and made Brevet-Major. From January, 1920, to December, 1929, he served with the Egyptian State Railways as, successively, Divisional Locomotive Superintendent, Lower Egypt; Carriage & Wagon Works Manager, Cairo; Manager of the wagon and locomotive repair works at Alexandria; and, finally, Acting Deputy Chief Mechanical Engineer. From 1930 to 1934 he was Instructor, Railway Operating & Mechanical, Railway Training Centre, Longmoor, with the rank of Major, and from 1934 to 1935 commanded the Fortress Engineers at Gibraltar (Lt.-Colonel, 1935). In 1936 he was appointed Assistant Director of Transportation at

Headquarters, British Troops in Egypt, as Temporary Colonel, during the Abyssinian emergency and during the initial construction of the Western Desert Railway to Mersa Matruh. Later that year he became A.D.Tn., Headquarters, British Troops in Palestine, in addition to Egypt, and was made an O.B.E. for his services. Sir Donald McMullen was Commandant of the Railway Training Centre, R.E., Longmoor (as Lt.-Colonel), from January, 1937, to March, 1939, and then, until September, 1939, was Area Officer under the Director-General of Munitions Production, Southern Area. Thereafter, until July, 1940, he was Director of Transportation, B.E.F., France, with the rank of Brigadier, and was awarded the C.B.E. After a short time as Inspector, Transportation Troops & Services, in connection with anti-invasion measures, he was appointed Director of Transportation, War Office, and was promoted Major-General in 1941. He held the last-named position until after VJ Day, and was made a C.B. and later a K.B.E. His responsibilities included the raising of Transportation troops for home and overseas service and arrangements for the provision of all stores, rolling stock, bridges, cranes, ships, and so on, for all the military requirements of railways, ports and canals. He was appointed Deputy Chief (Executive), Transport Division, Control Commission for Germany (British Element), in October, 1945, and remained as such until the end of March, 1948. He was responsible for all transport in the British Zone, and for the rehabilitation of the German railway, harbour, coastal shipping, inland water and road transport systems. From October, 1947, to March, 1948, Sir Donald McMullen was Joint Chief (British) of the combined British-American Transport Group situated at Frankfurt after the economic fusion of the United States and the British Zones.

Mr. Bernard George Turner, M.Inst.T., who, as recorded in our April 16 issue, has been elected Chairman of the Road Haulage Association for 1948-49, is Managing Director of Thomas Allen Limited, and Chairman & Managing Director of the Victoria Motor Haulage Co. Ltd., Edmund Tanton Limited, Henry Smith & Son Ltd., Henry Bournier Limited, and the Stanford Engineering Co. Ltd. He has been actively concerned in the work of the associations of the road haulage industry since 1933. From the inception of the Road Haulage Association, Mr. Turner has been a National Vice-Chairman of that Association, and a Member of Council of the National Road Transport Federation, and he has recently been elected a Vice-Chairman of the Federation. Before the formation of the National Road Transport Federation and the Road Haulage Association he was Chairman of the Plan-



Mr. B. G. Turner

Elected Chairman of the Road Haulage Association for 1948-49



The late Mr. J. F. Lean

Principal Assistant to the General Manager, Great Western Railway, 1929-36



Mr. E. J. Vipond

Appointed Assistant Chief Officer (Operating), Railway Executive

ning Committee under the Perry Conference, and President of the London & Home Counties' Haulage Contractors' Association. Mr. Turner is a member of the Road & Rail Central Conference, and of the committee of management of the British Road Federation, and a Member of Council of the Institute of Transport. He is also the Senior Warden of the Worshipful Company of Carmen, and a Vice-President of the London Cartage & Haulage Contractors' Provident Institution.

Mr. John Frederick Lean, O.B.E., whose death, at the age of 77, we recorded last week, retired in 1936 from the position of Principal Assistant to the General Manager, Great Western Railway, having served in the General Manager's Office throughout his career, which began in 1887. After obtaining experience in various sections of that office, Mr. Lean was given charge of the department dealing with private siding

agreements, light railways, joint railway matters, electrification schemes and other subjects. In 1919 he was appointed Chief Clerk, and two years later Assistant, to the General Manager. He was appointed Principal Assistant in 1929. For many years up till his retirement he directed special attention to staff matters. He represented the General Manager on the sectional and railway councils; was a member of the Central and National Wages Boards set up under the Railways Act, 1921; and was a member of the Railways Staff Conference and other bodies. He was a member of the special joint committee which drew up the scheme of negotiating machinery which came into force in March, 1935, and under that scheme was a member of the Railway Staff National Council. Mr. Lean was an Officer of the Order of St. John of Jerusalem, and for seventeen years he was Chairman of the G.W.R. Ambulance Centre. He was made an O.B.E. in the New Year Honours, 1936.

Mr. E. J. Vipond, M.B.E., M.C., who, as recorded in our March 19 issue, has been appointed Assistant Chief Officer (Operating), Railway Executive, entered the service of the former North Eastern Railway, in 1913, in the Superintendent's Office, York. From 1915 until 1919 he served with the Northumberland Fusiliers, being wounded in 1918. He attained the rank of Captain and was awarded the Military Cross. In 1919 he returned to railway service and subsequently obtained experience in the various sections of the Commercial and Operating Departments. Mr. Vipond was appointed Chief Trains Clerk & Chief Controller, District Superintendent's Office, Darlington, in 1934, and a year later became Assistant Goods Agent, Newcastle Forth. In 1936 he was made Chief Clerk, District Superintendent's Office, Newcastle, and in 1937 he went to York as East Coast Inspector, an all-line appointment dealing with the working of East Coast passenger trains between London and



Mr. A. E. Bates

Appointed Carriage & Wagon Works Superintendent, Derby, London Midland Region, British Railways



Mr. E. Stanley

Appointed Carriage & Wagon Works Superintendent, Earlestown, London Midland Region, British Railways



Mr. M. E. Constant

Appointed Personal Assistant to Chief Civil Engineer, Southern Region, British Railways

Scotland. In the next year he was appointed Assistant to the Superintendent & Locomotive Running Superintendent (Trains), North Eastern Area, York. On the formation, in 1941, of the All-Line Traffic Regulating Office, York, an office dealing with the regulation of freight traffic throughout the whole of the L.N.E.R., he became Traffic Regulating Officer; and when, in August, 1942, the Central Traffic Office was formed with headquarters in London, for regulating the movement of traffic and distributing locomotive power to the best advantage, he was appointed Head of that Office, being given the title of Principal Assistant (Operating) from December 1 of that year. In 1945 Mr. Vipond became District Superintendent, York. He was awarded the M.B.E. in 1943.

Mr. A. E. Bates, Works Superintendent, Carriage & Wagon Works, Earlestown, London Midland Region, British Railways, who, as recorded in our March 19 issue, has been appointed Works Superintendent, Carriage & Wagon Works, Derby, was born at Derby, and received technical training at Derby Technical College, and works training in Derby Carriage & Wagon Department, L.M.S.R. From 1929-35 he was a draughtsman in the works drawing office of Derby Carriage & Wagon Department, and from 1935-42 Works Foreman, Welding & Underframe Shop, New Carriage Body Building Shop, Derby. In 1942 he was appointed Assistant to Works Superintendent (Production Planning), Derby Carriage & Wagon Works, and from 1943 carried out special duties at headquarters, including the introduction of progressive repairs for wagons at outstations. In 1945 he became Assistant Works Superintendent, Derby Carriage & Wagon Works. During the recent war he was Deputy-Controller of the repair organisation for dealing with "Hampden" bomber aircraft, of which organisation the late Mr. C. E. Fairburn was Controller. Mr. Bates went to Earlestown as Works Superintendent in 1946.

Mr. E. Stanley, who, as recorded in our March 19 issue, has been appointed Works Superintendent, Carriage & Wagon Works, Earlestown, London Midland Region, British Railways, served his apprenticeship at the locomotive, carriage and wagon works of the North Staffordshire Railway and received his technical training at the Stoke-on-Trent Technical Institutes. After passing through the various workshops he entered the carriage and wagon drawing office and later was transferred to the locomotive drawing office, where he remained until the grouping in 1923, when he returned to the Carriage & Wagon Department, assisting the Works Manager at Stoke Works. In 1925 he was transferred to the L.M.S.R. chief carriage and wagon drawing office at Derby. From 1929-31 he was a member of the Wagon Betterment Committee, afterwards serving for six months on the main Manufacturing Cost Committee, before becoming, in 1932, Progress Assistant to the Works Superintendent, Carriage & Wagon Department, Derby. From 1937-42 Mr. Stanley was Assistant Chief Carriage & Wagon Draughtsman, Derby, and then he was appointed Assistant to the Chief Outdoor Assistant for Carriages & Wagons. In 1944 he was appointed Assistant Works Superintendent, Wolverton.

Mr. Mark E. Constant, B.Sc. (Eng.), A.M.I.C.E., A.M.I.Struct.E., who, as recorded in our February 20 issue, has

been appointed Personal Assistant to the Chief Civil Engineer, Southern Region, British Railways, was educated at Harrow and at University College, London. He joined the Southern Railway as Junior Engineering Assistant in the Bridge Office in 1927. Subsequently he became a General Manager's cadet, and was attached as an engineering cadet to Mr. George Ellson, then Chief Engineer. Until his present appointment Mr. Constant had been working as Engineering Assistant, Maintenance Engineer's Office. In 1938-39 he had served in the Supplementary Reserve in the First Movement Control Group, and he was with the B.E.F. in France from September, 1939, to June, 1940. He served in Greece in 1940-41, and was taken prisoner of war during the evacuation; and after serving in India in 1945-46 as A.Q.M.G. (M.), G.H.Q., he was demobilised with the rank of Lt.-Colonel in October, 1946.

Mr. G. P. Belsham has been appointed a Director of Brookhirst Switchgear Limited, Chester, retaining his position as Works Manager.

Mr. H. A. Peet, M.I.Loco.E., who, as recorded in our March 19 issue, has been appointed District Locomotive Superintendent, Plaistow, London Midland Region, British Railways, commenced his railway career with the Midland Railway as a privileged apprentice in the Bristol shops in 1917. After serving in H.M. Forces in Germany, he completed his apprenticeship in the C.M.E. Works, Derby. He subsequently held various appointments at Keighley, Skipton, Saltley, and Toton, before being made Assistant District Locomotive Superintendent, Plaistow, stationed at Devons Road, in 1937. He was appointed to a similar position at Willesden in 1943, and in 1945 went to Derby as Utilisation Assistant to the Divisional Operating Manager, where he remained until taking up his present position.

Mr. W. Yeaman, who, as recorded in our January 9 issue, has been appointed Commercial Superintendent, Scottish Region, British Railways, joined the Caledonian Railway in 1903, in the District Traffic Superintendent's Office, Perth, and subsequently was engaged as a relief clerk. In 1911 he was transferred to the Chief Goods Manager's Office, Glasgow, and in 1916 was appointed Chief Staff Clerk in the Chief Goods Manager's Department. He afterwards took charge of the indoor work appertaining to the Chief Goods Manager's Office, and was promoted to be Chief Clerk, in which capacity he continued up to 1923. On the 1923 amalgamation of the railways, he was appointed Chief Clerk to the Divisional Goods Manager (Northern Division) of the L.M.S.R. In 1925 Mr. Yeaman was appointed Indoor Assistant, and he became Assistant Goods Manager (Northern Division) in May, 1927. He acted as District Goods Manager at Leeds from June to the end of 1929, and in January, 1930, was appointed Commercial Assistant to the Chief Goods Manager, Euston. In 1931 he became Goods Manager, Northern Division, L.M.S.R., and in 1932, when the traffic departments of the L.M.S.R. were reorganised on the basis of a commercial and operating department respectively, Mr. Yeaman became Commercial Manager for Scotland. He continued to occupy that position until January 1, 1948, when he was appointed Commercial Superintendent, Scottish Region.

Colonel R. B. Emerson, lately Chief Commissioner of Railways, India, has joined the boards of the associated companies in the Dowsett group, and has been appointed Deputy-Chairman of Dowsett Engineering Construction Limited, Dow-Mac (Construction) Limited, Dow-Mac (Plant & Transport) Limited, Dow-Mac (Quarries) Limited, and Dow-Mac (Products) Limited, and Joint Managing Director of Brooke Marine Limited.

Among those recently transferred from associate membership to full membership of the Institution of Civil Engineers are Mr. T. S. Brass, System Engineer, Bloemfontein, South African Railways, and Mr. M. G. R. Smith, Divisional Engineer, Taunton, Western Region, British Railways.

Major C. R. Dibben, who since 1919 has been Midland Secretary of the Federation of British Industries, is retiring from that office to devote more time to other industrial interests. His place as F.B.I. Midland Regional Secretary will be taken, on September 1, by Mr. Ion Earle, who joined the F.B.I. in 1938 as Assistant to Major Dibben in the Birmingham Office.

Colonel D. R. Johnson has been appointed Sales Executive of Bryce Fuel Injection Limited.

Mr. H. H. Cundell has been appointed Sales Manager, responsible for the Sales Department, British Aluminium Co. Ltd., and Mr. A. W. Langham, who temporarily undertook responsibility for the Sales and Sales Planning Departments, subsequent to the appointment of Mr. E. A. Langham to India last year, will continue to be responsible for the Sales Planning Department, with the title of Sales Planning Manager as before. Mr. E. E. Spillett has been appointed Development Manager, in place of Mr. Cundell; and Mr. P. S. W. Swabey has been appointed Assistant Development Manager, succeeding Mr. Spillett.

LONDON MIDLAND REGION STAFF CHANGES

The following staff changes are announced in the London Midland Region, British Railways:—

Mr. W. O. Parish, Head Office Inspector, Chief Operating Manager's Office, Euston, to be Goods Agent, Brompton & Fulham.

Mr. E. Kelly, Chief Commercial Manager's Office, Euston, to be Goods Agent, Wigan.

Mr. W. F. Holden, Goods Agent, Chester, to be Goods Agent, Oldham.

Mr. G. F. Stoddart, Goods Agent, Denton (Lancashire), to be Goods Agent, Bedford.

Mr. W. E. Crompton, Chief Claims Clerk, District Goods & Passenger Manager's Office, Stoke, to be Goods Agent, Longton.

Mr. T. R. Cliff, Yardmaster, Crofton Junction (Yorkshire), to be Stationmaster & Goods Agent, Dagenham.

Mr. H. Lightowers, Chief Parcels Clerk, Sheffield, to be Passenger & Parcels Agent, Birkenhead (Woodside), also in charge of Liverpool Landing Stage.

Mr. H. J. Read, Controller, District Operating Manager's Office, London (Midland), to be Yardmaster, St. Pancras.

Mr. L. A. Harris, Chief Permanent Way Inspector, Northampton, to be Chief Permanent Way Inspector, Walsall.

Mr. B. Swinnerton, District Permanent Way Inspector, Stafford, to be Chief Permanent Way Inspector, Stoke.

Mr. J. W. Theobald, Goods Agent, Maiden Lane (London, N.W.), retires.

Sir Cyril Hurcomb in the Southern Region

On May 5 and 6, Sir Cyril Hurcomb, Chairman of the British Transport Commission, continued his visits to Southern Region establishments in the course of one of the tours of inspection he is carrying out on British Railways with the object of making the acquaintance of the staff and local officials. He had already visited Woking on April 27, as reported last week.

Sir Cyril Hurcomb visited London Bridge Station during the morning business traffic on May 5. On this occasion he

Docks & Marine Manager, Mr. R. E. Sinfield, Commercial Superintendent; and Mr. V. A. M. Robertson, Chief Civil Engineer. It was met on arrival at Dover by Mr. T. W. D. Abell, Divisional Marine Manager, and his Traffic Assistant, Mr. A. Huckle.

From Dover, the party went to Folkestone and toured the harbour premises, accompanied by Mr. G. A. Pugsley, Traffic Assistant, and Captain L. E. Addenbrooke.

later mounted the footplate of another engine of the class ready to go out on trial. The controls, gauges, and other footplate fittings were explained to him by Driver Gumbrill, who recently featured in the B.B.C. broadcast, "Down Your Way." Sir Cyril Hurcomb expressed pleasure at the clean workshops and keen staff, and remarked: "The repair of rolling stock is one of the most important contributions that can be made to the recovery of the country, and the work being carried out will give the public the service demanded."

Proceeding to Eastleigh, the party was met by Mr. F. Munns, the Works Superin-



Mr. O. V. Bulleid (left) conversing with Mr. J. H. Brebner

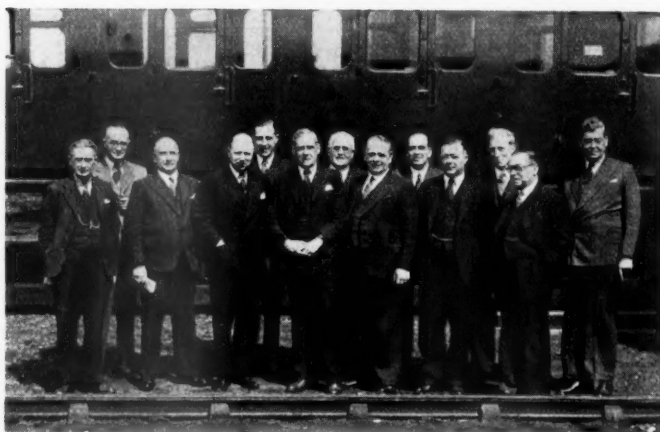
announced that a new Continental Inquiry Office would be brought into use at Victoria Station in June and that a separate office would be established for Channel Islands bookings and inquiries.

Later, Sir Cyril Hurcomb visited Hither Green Sidings, accompanied by Mr. J. H. Brebner, Chief Public Relations & Publicity Officer of the Commission, and Mr. W. P. Allen, Member of the Railway Executive. The party, which included Mr. John Elliot, Chief Regional Officer, Southern Region, Mr. S. W. Smart, Superintendent of Operation, Mr. S. B. Warder, Electrical Engineer, and Mr. A. E. Hammett, Commercial Superintendent, proceeded to Slades Green.

In the afternoon of May 5 the party went to Dover Marine, where the train ferry dock and pump house were inspected. The arrival of the "Golden Arrow" service from Calais and the disembarkation of passengers were witnessed; and, later, the loading on to the ferry of the sleeping cars for Paris from Victoria by the night ferry service. On this occasion the party was joined by Mr. R. P. Biddle,



Sir Cyril Hurcomb and party at Dover, where the handling of "Golden Arrow" and train-ferry traffic was watched



The party at Slades Green during the inspection of the electrical depot

On May 6 visits were paid to the works at Brighton and Eastleigh. Sir Cyril Hurcomb, Mr. Allen, Mr. Brebner, and Mr. Elliot were joined on this occasion by Mr. O. V. Bulleid, Chief Mechanical Engineer. At Brighton, among other things, Sir Cyril Hurcomb saw the boiler of a "Battle of Britain" locomotive being lowered on to its underframe and bolted in place, and

tendent, and during the inspection Mr. K. Morriss, Locomotive Works Manager, and Mr. C. A. Shepherd, Carriage Works Manager, were introduced to Sir Cyril Hurcomb. Finally, Salisbury motive power depot was visited, where the party was received by Mr. R. D. Steele, Superintendent of Motive Power, Western Division.

REDUCTION IN STEEL TUBE PRICES.—Stewarts and Lloyds Limited announces a special discount to home trade customers of 2½ per cent. off the prices of about 90 per cent. of the steel tubes manufactured by the company. It is pointed out that continuance of the discount depends on the cost of materials and labour and other relevant factors remain-

ing stable. In the event of adverse changes taking place, it may have to be withdrawn. The company explains that after the change-over from wartime to peacetime operations, increased production and the benefits of plant improvements have resulted in economies which have enabled this price reduction to be made. Stewarts and Lloyds also states that as a

result of improvements in process and finish, certain classes of welded tubes now can be made in lighter gauges than formerly, resulting in substantial economies in the use of steel. In addition, the range of these welded tubes will be extended shortly to larger sizes. As a result, an additional reduction in price to the consumer will be made.

British Automatic Co. Ltd.

The annual general meeting of the British Automatic Co. Ltd. was held at Winchester House, Old Broad Street, London, E.C., on May 11, Major R. D. K. Curling, M.C., Chairman of the company, presiding.

The Secretary, Mr. Ivan B. Lindley, read the notice convening the meeting.

The Chairman, in a statement issued with the report and accounts, said: Before I report on the state of the company's affairs, I wish to refer, with deepest regret, to the death, in July last, of one of my colleagues, Colonel William Parker, D.S.O. He was appointed to the board in 1930, the year following the reorganisation of the company, and from then until the early part of last year, when he underwent a serious operation, he was unsparing in his work for the company. We miss him as a friend, and as a most able colleague who took a keen interest in the company's affairs and the welfare of the staff.

Shortly after Colonel Parker's death, Mr. M. S. Lennie, who had completed 50 years with the company, including 25 as Secretary and 20 as a Director, retired in consequence of his failing health. Much as we regretted his leaving us, we heartily congratulate him on such an outstanding record of service, and wish him every happiness and improved health in his retirement. We have been fortunate in securing the services of Mr. W. T. James, O.B.E., and Mr. S. Parkes as directors.

Despite existing conditions, profits have been maintained, and your directors again recommend the payment of a dividend of 6 per cent., less income tax. The receipts from our weighing machines have increased steadily in the last few years, and the total for 1947 exceeded all previous records.

In this connection it is interesting to note that, before the first world war, the price for a weigh was one penny, and, despite the huge increases in costs that have taken place in the intervening 35 years, we still manage to offer one of the best values in the Kingdom—your weight for one penny! Our amusement machines continue to show good returns, despite the greatly increased operating costs, and, as in the case of the weighers, the price to the public is still the same as before the war.

As we have been unable for some years to retail confectionery through automatic machines, we have gradually acquired confectionery and tobacco shops as outlets for our quotas. These are making a very important contribution to the company's trading results. In fact, this section of our business has so justified itself, that we are proceeding with a plan of consolidation and expansion into a chain of retail confectioners and tobacconists trading under the name of Maxwell, that being the trade name of James Maxwell & Son Limited, our retail subsidiary in Scotland, acquired in 1945. Our group now operates a chain of over 60 shops.

Although trading during the year has been satisfactory, conditions have been difficult. Retail prices have advanced, but profit margins have been reduced. Consider the almost unbelievable increase in the price of cocoa beans, including duty, from 62s. per cwt. in January, 1947, to 130s. later in the year and 237s. now. Cocoa butter has advanced in price in the same period from 1s. 7d. to 4s. 11½d. per lb. In 1938 salaries and wages of the company and its subsidiaries were equivalent to 28 per cent. of the company's ordinary share capital, and the dividend paid was 4 per cent. free of

tax, equivalent to 5½ per cent. gross. In 1947 the corresponding figures were: salaries and wages 40 per cent., and the proposed gross dividend 6 per cent.

Fixed assets at £237,840 have increased by £41,810, mainly accounted for by the increase in leasehold properties and goodwill of £45,544 to £74,635. This represents the cost of the retail and confectionery businesses acquired during the year, less amounts written off. Current assets at £331,365 have increased by £22,800 and exceed current liabilities by £119,998. This is £1,658 less than last year. Stocks and stores have increased by £26,406 to £82,119, mainly on account of increased prices (the price of tobacco alone has increased by 40 per cent.) and the value of stocks acquired.

Current liabilities have increased by £24,458, which is more than accounted for by the increase in sundry creditors in respect of stock supplies. Deferred liabilities have been reduced by £7,095. We have at last managed to clear some of the repairs which have been outstanding as a result of the war, but at the same time there has been further accumulation.

Revenue reserves and surplus have increased by £6,090. Of this, £5,292 represents a profit of £9,622, less income tax, arising from the increase in the rates of tobacco duties last April, which your directors consider should be held in reserve against the time when the Government decides to reduce the rates of duties. In the profit and loss account the main changes are an increase of £2,890 in general expenses, a reduction of £7,830 in taxation and a decrease of £3,592 in respect of depreciation, etc.

It gives me very sincere pleasure to express my appreciation for the services rendered to the company by the General Manager, Mr. F. L. Timmins, the Assistant General Manager, Mr. W. J. Devenish, the Secretary, Mr. I. B. Lindley, and the managers and staff during the year. In conclusion, I would like to thank my colleagues on the board for the support and assistance they have given me.

The report and accounts were adopted, and the proposed dividend approved.

Allocation of Uruguay Sale Proceeds

By an agreement with the Uruguay Government on March 1, the British-owned railways in Uruguay and the Quarahim International Bridge Co. Ltd. are being acquired by the Government for £7,150,000. Transfer is to be effective as from June 30 last year, all operating receipts and expenses after that date, including those in London, being for the account of the Uruguay Government.

We reported in our April 23 issue that a panel had been set up to consider schemes for the allocation of the sale proceeds among stockholders. Its recommendation scheme is shown in the table herewith.

The proposals will require ratification by meetings of each company, and the directors hope to issue the necessary notices and explanations about the middle of June, with the object of holding the meetings late that month or early in July.

The sale is contingent on agreement by all companies, so that any class of stockholders rejecting the proposals would involve rejection of the whole scheme and of the sale agreement. This provision is similar to that made in connection with the sale of the British-owned railways in

Argentina. If ratified by the stockholders, the scheme must be submitted to the High Court, and then would require the ratification of the legislative authority of Uruguay. Finally, payment of the purchase price would be made in sterling to the Bank of England within 30 days. No interest is to be paid or will accrue on the purchase price.

TABLE OF ALLOCATIONS

Security	Capital outstanding	To receive	Amount
Central Uruguay Railway Co. of Montevideo Ltd.			
4½% 1st deb. stk. ...	1,150,000	100	1,150,000
Int. thereon at 4½% p.a. from Jan. 1, 1945, to July 31, 1948 (gross) ...			185,438
5% 2nd deb. stk. ...	3,740,000	85 (a)	3,179,000
Ordinary stock ...	6,000,000	12½ (b)	750,000
	10,890,000		5,264,438

(a) All arrears of interest to be cancelled; (b) any surplus or deficiency for account of ordinary stock

Uruguay Northern Railway Co. Ltd.			
5% prior lien deb. stock ...	49,002	105	51,452
Int. thereon at 5% p.a. from Feb. 1, 1939, to July 31, 1948 (gross) ...			23,276
5% income deb. stock ...	449,400	34 (c)	152,796
7% cum. pfd. stk. ...	250,000	10	25,000
Ordinary shares ...	100,000	2½ (d) and (e)	2,500
	848,402		255,024

(c) All arrears of interest to be cancelled; (d) all arrears of dividend to be cancelled; (e) any surplus or deficiency will be for account of these two stocks whose distribution will be increased or reduced in proportion to the amounts given in column 4 above

Midland Uruguay Railway Co. Ltd.			
5% prior lien deb. stock ...	162,773	100	162,773
Int. thereon at 5% p.a. from Feb. 1, 1948, to July 31, 1948 (gross) ...			4,069
5% deb. stk. ...	1,156,918	48½ (f)	561,105
Ordinary stk. ...	600,000	7½ (g)	45,000
	1,919,691		772,947

(f) All arrears of interest to be cancelled; (g) any surplus or deficiency for account of ordinary stock

Midland Uruguay Extension Railway Co. Ltd.			
5% deb. stk. ...	200,000	60 (h & i)	120,000
Ordinary shares ...	100,000	Nil	—
	300,000		120,000

(h) All arrears of interest to be cancelled; (i) any surplus for account of 5% debenture stock

North Western of Uruguay Railway Co. Ltd.			
6% 2nd deb. stk. ...	57,031	110	62,734
Int. thereon at 6% p.a. from Dec. 16, 1938, to July 31, 1948 (gross) ...			32,934
6% 1st pref. stk. ...	583,850	32 (j)	186,832
5% 2nd pref. stk. ...	293,173	11 (k)	32,249
Ordinary stock ...	120,120	5 (k)	6,006
	1,054,174		320,755

Capital repayment to 5% 1st deb. stockholders of the Quarahim International Bridge Company to be made in consideration of their releasing from their charge the benefit of certain agreements...

13,579

(j) All interest on arrears of interest to be cancelled; (k) any surplus or deficiency will be for account of these three stocks whose distribution will be increased or reduced in proportion to the amounts given in column 4 above

Quarahim International Bridge Co. Ltd.			
5% 1st deb. stk. ...	84,865	54	45,827
Capital repayment by North Western of Uruguay Ry. Company, as above ...		16	13,579
		70 (l)	59,406
Ordinary shares ...	10,000	Nil (m)	—
	£94,865		£59,406

(l) All arrears of interest to be cancelled; (m) any surplus for account of ordinary shares

Shorter Hours Recommended on Indian Railways

When the dispute between Indian railwaymen and the Government railways took a serious turn in 1946, the Government appointed a Pay Commission to go into the question of railwaymen's wages, and an Adjudicator to deal with other matters, namely, hours of work, periodic rest, leave reserves, and leave rules. While the recommendations of the Pay Commission, most of which by now have been accepted by the Government, have had the effect of raising wages considerably, the award of the Adjudicator, published recently, contains proposals which, by an all-round reduction in hours of work, would entail the engagement of about 79,000 more men by the Indian railways, and an additional recurring expenditure of Rs. 6½ crores.

The award emphasises that all categories of railway workers, including locomotive and traffic running staff, should be brought within the scope of the Hours of Employment Regulations and should be reclassified. These regulations, which apply to railwaymen other than those who are covered by the Factories Act or the Mines Act, implement the I.L.O. conventions of 1919 and 1921. They provide a 60-hr. week, rest periods, and overtime allowances for "continuous" workers; and an 84-hr. week with no statutory rest for essentially "intermittent" workers. There is a third class of railway servants, who, owing to the nature of their work, are excluded from the scope of these regulations.

The Adjudicator has suggested the classification of railwaymen into "intensive," "continuous," "essentially intermittent," and "excluded" categories, instead of the present three categories. The "intensive" class will include section controllers, staff employed in line-clear work, yard staff, signallers on heavy circuits, and wireless operators. Any railway servant employed continuously without a respite of at least six hours will be included in the "continuous" class. Such of the staff whose work includes periods of inaction aggregating six hours or more will be classified as "essentially intermittent." The "excluded" categories are to be limited to supervisory staff, health and medical services, persons employed in a confidential capacity, saloon attendants, and some others.

The report lays down that "intensive" workers should be employed on four shifts of 6 hr. each; "continuous" workers on three shifts of 8 hr. each; and "essentially intermittent" staff on two shifts of 12 hr. each. The statutory limits suggested are 45 hr. a week for "intensive" staff, 54 hr. a week for "continuous" workers, and 75 hr. a week for "essentially intermittent" workers. The award provides for the inclusion within the statutory limit of the time spent in taking over and handing over when it is more than 15 min. The effect of this will be that the hours of work for "intensive," "essentially intermittent," and "continuous" workers virtually will be reduced to 40, 51, and 72 hr. a week respectively.

Under the present rules, a weekly rest of 24 consecutive hours is prescribed for "continuous" workers. According to the report, this entails great hardships on certain staff, such as assistant stationmasters, who are obliged to work once or twice a week for 12 hr. at a stretch and to have only a short "off" period—e.g., from 4 p.m. to 12 p.m. or 12 noon to 8 p.m.

A rest of at least 30 consecutive hours in a week, which will include a full night and a full day, is recommended for all "intensive" and "continuous" workers. A 24-hr. period, including a full night, is suggested as weekly rest for "essentially intermittent" workers. For "excluded" inferior staff, a period of 48 consecutive hours in a month, or 24 consecutive hours in a fortnight, is recommended as the minimum rest. The report has suggested the employment of special staff by the railways for the provision of this relief.

As regards running staff, the report recommends that duty should not exceed 10 hr. at a stretch. Periodic rests for this staff should consist of four periods of not less than 22 hr. each a month. Such rest always should include a night in bed and be given at headquarters. As far as possible, staff should have such rest once every 10 days. It is suggested further that the Railway Board should issue instructions against continual night duty by running staff for more than six nights consecutively, and against keeping the running staff away from headquarters for

more than three or four days at a stretch.

Among the methods and principles suggested by the Adjudicator for the general guidance of administrations in placing leave reserves on a satisfactory basis are the following: for categories of staff for whom suitable substitutes are readily available, a lump sum grant should be placed at the disposal of the district officer, with power to appoint substitutes wherever necessary within that amount. For categories for whom it is not possible to find substitutes, adequate leave reserve based on the leave usually taken by the staff should be provided. In other cases a reserve should be provided on the basis of the minimum leave requirements.

For exceptionally unhealthy areas, a suitable addition varying from 3 to 5 per cent. of working strength should be made to the reserve. For purposes other than leave, a specified reserve, calculated on the basis of an estimate of the actual requirements, should be provided, except in the case of categories for whom substitutes are available.

The Adjudicator has recommended also that overtime should be at time and a half instead of time and a quarter.

Questions in Parliament

Crewe Locomotive Depot

Mr. F. J. Erroll (Altrincham & Sale—C.) on April 26 asked the Minister of Supply whether he was aware that there was a shortage of flat and half-round files at the Crewe locomotive depot of the London Midland Region of the Railway Executive; and what steps were being taken to improve the situation.

Mr. George Strauss (Minister of Supply), in a written answer, stated: No, sir; and I have had no approach from the Railway Executive on this matter.

Alexandra Palace Line

Captain John Crowder (Finchley—C.) on April 26 asked the Minister of Transport whether he was now prepared to give the London Transport Executive his approval under section 4(2) of the Transport Act, 1947, for the completion of the electrification of the Alexandra Palace line, having regard to the serious traffic congestion in that district.

Mr. Alfred Barnes (Minister of Transport), in a written answer, stated: I am informed by the B.T.C. that it is preparing a programme of development, to be settled on lines to be approved by me under the terms of section 4(2) of the Transport Act. Any such programme must have full regard to other urgent works and the need to restrict capital investment, so I cannot say at present when this particular work can be undertaken.

Travel to Grand National

Lt.-Commander J. A. Langford-Holt (Shrewsbury—C.) on May 3 asked the Minister of Transport how many employees of his department had been given leave to join a party from Paddington to Aintree and back as guests of the Railway Executive on Grand National day, March 20.

Mr. Alfred Barnes: None, Sir.

Commander Langford-Holt: Accepting the implication that such a trip did in fact go, will the Minister say whether, in his opinion, this is a correct use of public money?

Mr. Barnes: I do not accept the impli-

cation that the trip did go. My information is that it did not go.

Commander Langford-Holt: Is the Minister aware that I was informed at Paddington Station that it did go, and would he look into the matter?

Mr. Barnes: I have made inquiries from the British Transport Commission, and it has no knowledge of any official party, or that any official invitation was issued.

Refreshment Room Catering Licences

Mr. F. J. Erroll (Altrincham & Sale—C.) on May 3 asked the Minister of Food whether catering licences for public refreshment rooms operated by the Transport Commission were given on the understanding that they should serve the purpose of feeding the public in addition to catering for the needs of railway employees.

Dr. Edith Summerskill (Parliamentary Secretary, Ministry of Food) stated in a written answer: Yes, Sir.

Railway Wagon Repair Workers

Lt.-Colonel D. A. Price White (Cardarvon Boroughs—C.) on May 4 asked the Minister of Labour the number of persons registered at employment exchanges in the country as being fully and part-time employed in the repair of railway wagons; and of such number, how many persons were so registered in North Wales.

Mr. George Isaacs (Minister of Labour), in a written answer, stated: I regret that these figures are not available.

Concrete Railway Sleepers

Mr. I. Mikardo (Reading—Lab.) on May 3 asked the Minister of Transport what progress was being made in the use of concrete for railway sleepers to conserve supplies of timber.

Mr. Alfred Barnes: In addition to the original factory at Tallington, arrangements have been made for concrete sleepers to be manufactured at three other factories, two of which are already in operation.

Mr. George Hicks (Woolwich East—Lab.): Can the Minister give me any idea of the proportion of timber used in this country for railway sleepers, that is, the

proportion out of the amount of timber that there is in the country?

Mr. Barnes: I could not give the proportion out of the total amount of timber in the country. For main lines alone we require millions of sleepers every year.

Transport and Electricity Stocks

Captain Charles Smith (Colchester—Lab.) on April 28 asked the Secretary to the Treasury why British Transport and British Electricity Stocks had not been placed on the Post Office Register.

Mr. Douglas Jay (Economic Secretary to the Treasury) in a written answer stated: Because they are not Government Stocks.

Penalties for Railway Ticket Offences

Mr. Wilson Harris (Cambridge University—Ind.) on May 4 asked the Minister of Transport whether he would seek powers to increase the maximum penalty of a 40s. fine for the offence of travelling without a railway ticket with intent to avoid payment.

Mr. Alfred Barnes stated in a written answer: No, Sir. A fine of forty shillings is the maximum penalty for a first offence, but for a second or subsequent offence the maximum is £20 or one month's imprisonment. I have received no suggestion that these penalties are inadequate.

Delays in Railway Transit

Mr. Henderson Stewart (East Fife—Lib. Nat.) on May 4 asked the Secretary of State for Scotland whether he was aware of the difficulties of the fishermen at Crail in marketing their lobsters and crabs in London; and what steps he proposed to take in the matter.

Mr. Arthur Woodburn: The fishermen at Crail recently complained that lobsters and crabs consigned to London by rail did not reach the market in good condition because of delays in transit. The Railway Executive has been asked whether any improvement can be made, and I shall arrange that Mr. Stewart is informed of developments.

Transport Charges for Cement

Mr. E. G. Willis (Edinburgh North—Lab.) on May 4 asked the Secretary of State for Scotland if he was aware that local authorities in Scotland had had to pay higher prices for cement as a result of rail transportation; and whether he would take steps to have that charge borne by the Exchequer.

Mr. Arthur Woodburn (Secretary of State for Scotland): The Minister of Works recently secured additional supplies of cement to expedite Scottish housing progress, and because of ship-loading difficulties these supplies are being taken as a matter of urgency by road to the schemes of local authorities who are willing to pay the extra transport charges. In the circumstances I do not propose that the cost should be borne by the Exchequer.

Mr. Henderson Stewart (East Fife—Lib. Nat.): Is the Secretary of State aware that, although the Minister of Works told me last week there was no shipping accommodation, I am informed that in fact ships are leaving the Thames for Scotland with no cargo at all, and will he look into it?

Mr. Woodburn: Mr. Stewart will have to apply to the Minister of Transport about that.

Mr. Hector Hughes (Aberdeen North—Lab.): Will the Minister consult with the Minister of Transport, or British Railways, or whoever is the appropriate authority, with a view to securing a flat

rate for the transport not only of cement, but also of fish and other commodities between North and South?

Mr. Woodburn did not reply.

Wagons for Rhodesia

Squadron-Leader E. Kinghorn (Great Yarmouth—Lab.) on April 29 asked the Secretary of State for Commonwealth Relations what steps had been taken to obtain a quota of the redundant repairable railway wagons in this country so that they might be modified for use on the Rhodesian railway system.

Mr. P. J. Noel-Baker (Secretary of State for Commonwealth Relations) in a written answer stated: I am sorry to inform Squadron-Leader Kinghorn that there are no redundant railway wagons in the United Kingdom which could be repaired and exported overseas. All the wagons on our railways which are fit for repair are urgently required in the United Kingdom.

Nationalisation of Iron & Steel Industry

Viscount Elibank in the House of Lords on May 4 asked His Majesty's Government whether it would publish the report made to it at its request by Dr. H. J. van der Bijl, head of the South African iron and steel industry, who, at the request of His Majesty's Government, had visited this country two years ago with the object of investigating the iron and steel industry here, and who was alleged to have advised the Government against the nationalisation of the industry and to have given his reason for that advice.

Lord Henderson, who had been asked to reply, said: Dr. H. J. van der Bijl visited the United Kingdom in the summer of 1946, in connection with an invitation by the United Kingdom Government to become the first Chairman of the Iron & Steel Board. While he was unable, owing to his interests in South Africa, to accept this invitation, the Government had the benefit of consultations with him on the arrangements for the appointment of the board and various general questions affecting the future operation of the iron and steel industry. But the consultations were not conducted with a view to the publication of a report, and the Government regrets it does not see its way to comply with Viscount Elibank's request.

Viscount Elibank expressed considerable disappointment with the reply of the Government that it did not propose to publish the report. Evidently it was a useful report, and he asked the Government whether it had so little faith in its own policy that, when it called to aid the advice and counsel of an expert in the subject, it was not prepared to disclose what he said for fear of the result upon the mind of the public. He asked that question quite categorically.

Lord Henderson said that if Viscount Elibank would look at his reply on Wednesday he thought he would see that there was no justification in it for the suggestions that he had made.

Lord Strabolgi asked whether it was not a fact that the great and successful iron and steel industry, under the leadership of Dr. H. J. van der Bijl, in South Africa, was owned as to 90 per cent. of its stock by the South African Government.

Viscount Elibank: In reference to the question that has just been asked, may I ask whether the Government knows that, while what Lord Strabolgi has said is true to a certain extent, there is no obstacle in South Africa to any—

Viscount Addison: May I intervene on a point of order? With great respect to Viscount Elibank, I must request that, in

accordance with traditions and rules of the House, starred questions are not made the subject of debate, even in the form of interrogations.

Viscount Elibank: On the point of order, I wish to ask this question: Is the Government aware that there is no obstacle to any private individual setting up iron and steel works in South Africa in opposition to the present South African steel industry?

Lord Henderson: I do not think that arises out of the question originally put by Viscount Elibank.

Notes and News

Clerk, Grade II, Required.—A clerk, grade II, not over 30 years of age, is required by the Kenya & Uganda Railways & Harbours, for one tour of 36 to 48 months, with prospects of permanency. See Official Notices on page 587.

Overseas Representative Required.—A locomotive engineer possessing high technical qualifications, and with administrative commercial experience, is required by the Locomotive Manufacturers' Association of Great Britain as Overseas Representative. See Official Notices on page 587.

Railway & Canal Securities (Conversion Date) Order.—The Minister of Transport has made the Railway & Canal Securities (Conversion Date) (No. 4) Order, 1948 (Statutory Instrument 1948 No. 810). Copies of the Order are obtainable from H.M. Stationery Office, or through any bookseller, price 1d. each.

New Ships for L.M.R. Holyhead—Kingstown Service.—The first of two new combined passenger and cargo ships, each of about 5,200 tons gross, which are being built by Harland & Wolff Limited at Belfast for the Holyhead—Kingstown service of the London Midland Region, will be ready for launching in July. The ships will be called *Hibernia* and *Cambria*, application having been made to the Minister of Transport for permission to rename the ships now bearing these names as *Cambria II* and *Hibernia II*. The new ships, which will each have a passenger capacity of 2,000, will be nearly 400 ft. long, and will be powered by diesel engines, giving a speed of 21 knots.

Scottish Railways Ambulance Shield.—The thirtieth competition for the Scottish Railways Ambulance Shield was held at the headquarters of the St. Andrew's Ambulance Association, Glasgow, on April 30, when eight railway teams from Aberdeen and District (2 teams), Coatbridge (Kipps), Dundee West, Edinburgh (Waverley), Glasgow (Eglinton Street), Kilmarnock, and Motherwell competed. The Motherwell team won the shield by gaining 255 points from a possible total of 300, and Edinburgh (Waverley) took second place with 252 marks. At the close of the competition, the presentation of the Scottish Railways Ambulance Shield to the winning team, with individual prizes to members of the teams taking first and second place, was made by Sir Ian Bolton, Bt., O.B.E., Part-time Member, British Transport Commission. Also present on the platform were Mr. T. F. Cameron, Chief Regional Officer, Scottish Region, and Mr. T. H. Moffat, O.B.E., Deputy Chief Regional Officer, Scottish Region. This competition was instituted in 1909, by the general managers of the five rail-

way companies in Scotland, to stimulate interest in ambulance work on Scottish railways, and subsequent to the amalgamation in 1923, the contest was between the L.M.S.R. and L.N.E.R.

Swansea Rail Bridge Demolition.—A contract for the demolition of a brick-arch bridge carrying a disused tramway over the Swansea Vale line of the London Midland Region between Swansea (St. Thomas) and Swansea (Upper Bank) Stations has been placed with the Demolition & Construction Co. Ltd. The work will be carried out at week-ends.

British Automatic Co. Ltd.—A profit of £23,345 was shown for 1947, after tax and depreciation, against £15,891 in the previous year. Adding £10,954 brought in, the total available for distribution is £36,299, out of which a dividend of 6 per cent. is declared again. An allocation of £5,292 is made to revenue reserve, no such provision having been made in 1946, and the carry-forward is £11,752.

Transport Fares Increase in Ulster.—It was announced on April 30 that road and railway fares in Northern Ireland will be increased by one fifth as from June 1. A spokesman of the public transport undertakings said the increase would bring fares up to 150 per cent. of the pre-war prices and had been made inevitable by the increased costs of working and maintenance. Passenger fares had been increased last in September, 1946, when they were brought up from 115 per cent. of the pre-war rate to 123½ per cent. There would be no further increase in freight charges, which were raised by 55 per cent. on March 1.

Diesel-Electric Locomotives for Argentina.—Reuters reports a statement from the American Embassy in Buenos Aires that the Buenos Aires Provincial Railway is inviting tenders for six metre-gauge diesel-electric locomotives with spare parts and accessories. The locomotives required are classified in two types, one for a maximum speed of 90 km.p.h. and one for a speed of 50 km.p.h. Both may have four or six driving axles, and a maximum load per axle of 14 tonnes is stipulated. Complete regulations, conditions, specifications, and blueprints are obtainable at a cost of ps. 100 per set from the Ferrocarril Provincial de Buenos Aires Administracion General, Calle 56 y 135, La Plata, Argentina.

Winsford, L.M.R., Accident Inquest.—The jury returned a verdict of death by misadventure at the inquest, concluded on May 6, on the 24 persons who were killed in the collision at Winsford, Cheshire, on April 17 (see our issue of April 23). Evidence was given by a signalman that he had accepted the passenger train at 12.5 a.m., and at 12.11 had made an entry indicating that the train had passed him at that time. He went down twice on to the line to look for the train, which Minshull Vernon signal box was unable to see. He himself could see neither the train nor any lights, and gave the "train out of section" signal for a train which he had not seen pass. The signalman said that he had been ill in bed the week-end before the accident. The soldier who had pulled the communication cord, thereby causing the passenger train to stop, gave evidence at the inquest. The coroner told the jury he did not think they could say much more than that this action had started a chain of events. The jury expressed the opinion that the soldier, who said he had pulled

the cord "on the spur of the moment" to enable him to get home sooner, had acted selfishly. A rider recommended the Railway Executive to adopt a system for warning the driver and guard by the communication cord that would take out of the hands of passengers the power to pull up the train.

Road Accidents in March, 1948.—The return issued by the Ministry of Transport of the number of persons reported to have died, or to have been injured, as a result of road accidents in Great Britain, during the month of March last, shows 322 deaths (compared with 302 in March, 1947), 2,167 seriously injured (compared with 2,125 in March, 1947), and 7,814 slightly injured (compared with 7,724).

Railway Pilfering.—In his address to Scottish representatives of the combined railway police, in Edinburgh, on May 8, General Sir William Slim, Member, Railway Executive, said that pilfering cost British railways £2,600,000 last year and no organisation in the world could stand that. Paying tribute to the railway police, he said they were making a tremendous contribution to the nation and railways, especially with the check they were keeping on pilfering, thieving and dishonesty.

Western Region Summer Services in London Division.—Among the changes affecting stations in the London Division of the Western Region in the May 31 timetables will be a new service daily from Reading to Taunton and principal stations to Plymouth, at 11.45 a.m. except Saturdays and 12.52 p.m. Saturdays only. There will be a new train from Reading at 11.50 a.m. on Sundays to Westbury (for Weymouth), Taunton and principal stations to Plymouth. Basingstoke, Reading West, and Oxford will be served in both directions by the through cross-country trains between Bournemouth, Birmingham, Birkenhead, Newcastle, and Sheffield.

New Tea Trolley at Victoria Station.—A new stainless-steel tea trolley has been introduced at Victoria Station, Southern Region, by Gordon Hotels Limited. Its design is another step forward on British Railways in giving the public the most up-to-date equipment for serving food. All exposed surfaces are in highly-polished stainless steel, allowing for easy cleaning and good appearance. The heating unit is supplied by pressure-gas containers which bring 12 gal. of water in two tanks to boiling point in about 30 min. A supply of boiling water is then maintained throughout the day. A fresh-water tank feeds a washing-up sink with a constant change of water for cleaning crockery; tables or supports for cups and saucers and plates are provided by sliding shelves which extend from the sides of the trolley. M. Trompetto, Chef of the Grosvenor Hotel, is responsible for provisioning the trolley.

Rapid Track Renewal on L.M.R.—What is considered in all probability to be a record for the high-speed relaying of main-line railway track in this country was achieved recently on the down main line of the London Midland Region (Midland Division) between Chesterfield and Clay Cross, where 2,090 yd. of pre-fabricated track were relaid by the crane method in a net working time of 5 hr. Two cranes were used, and the numbers of men employed were 48 on relaying and 47 on re-ballasting. Between 6.55 a.m. and 12.55 p.m., the old track was completely

removed, 475 tons of ballast were unloaded (the new track being given a lift of 2 in.), and 104 pre-fabricated rail lengths of 60 ft., and one length of 30 ft. were laid by the crane method and connected up. The overall time for which the men were engaged was 6 hr., but the net working time was reduced to 5 hr. by the deduction of 30 min. for meals and another 30 min. for interruption by traffic passing on adjacent lines.

New U.S. Nylon Upholstery Fabrics.—Reuters reports that six new lines of easily cleaned, durable, colour-fast, nylon upholstery fabrics, designed specifically for transport purposes at the instigation of railway and motorcar interests, are being produced on a limited scale by the Burlington Mills Corporation, U.S.A. Production is principally from 70-denier yarn. One of the new fabrics, described as a Bedford cord, which is composed of both spun and filament yarn, proved stronger under test than the best woollen material. Prices for the new fabrics, which range from \$3 to \$3.75 a yard, are claimed to be 50 per cent. lower than those now paid for heavy pile fabrics.

Increased Sailings on Lake Windermere.—Compared with last summer, a considerably increased service of sailings is to be provided on Lake Windermere by the L.M.R. this year. The service will be resumed for the season on Whitsun Sunday, May 16, when the L.M.R. branch line from Ulverston to Lake Side will be reopened in connection with the steamers. The two motor craft, *Swan* and *Teal*, together with one of the steam yachts (*Swift* or *Tern*), will maintain regular services throughout the season, while additional steam yacht sailings will be provided during July, August, and early September. Last year, only two vessels sailed throughout the season, with a third providing additional sailings on three days of the week from June to August.

Carriage Turn-Round Targets, Southern Region.—An innovation in the direction of keeping staff informed of the importance of their work to the travelling public has been made in three electric rolling stock shops of the Southern Region. The shops concerned are Slades Green, Peckham Rye, and Durnsford Road, in each of which a target board is displayed showing the day-to-day total of electric coaches held for overhaul or repair. Since the number of coaches held for repair should not exceed 200, the position is illustrated further by means of a graph, using red chalk to indicate when the numbers are above 200 and green when they are below. At the top of the board is the reminder: "In order to give the public the service they need, the stock under and awaiting repair should not exceed 200 coaches. See how we stand today."

Paris Engineering Congress to Meet in September.—The International Mechanical Engineering Congress (Congrès International des Fabrications Mécaniques), to be held in Paris from September 13 to 18, will be the first devoted to the industrialist's point of view rather than the technologist's, being organised by the engineering trade associations of industrial nations in Western Europe. The objects of the congress are to collect the most recent information on new methods of metal working and to establish what lessons of a general nature, so far as the basic design of products is concerned, have been brought to light by the development of manufacturing technique. British contri-

OFFICIAL NOTICES

Crown Agents for the Colonies

APPLICATIONS from qualified candidates are invited for the following post:—

CLERK, GRADE II, required by the Kenya & Uganda Railways & Harbours Administration for one tour of 36 to 48 months, with prospects of permanency. Salary according to age and experience in the scale £315 rising to £405 a year, plus cost-of-living allowance of £77 10s. a year for single man and between £118 and £187 10s. for married man, according to number of children. Outfit allowance £30. Candidates not over 30 years should have had experience in Head or District Office Railway Revenue accounting methods. Knowledge of Station Accounting an advantage. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/17930 (3E) on both letter and envelope.

INTERNATIONAL RAILWAY ASSOCIATIONS.

Notes on the work of the various associations concerned with International traffic, principally on the European Continent. 2s. By post 2s. 2d.

LOCOMOTIVE Manufacturers' Association of Great Britain invite applications for the appointment of Overseas Representative from candidates of British nationality possessing high technical qualifications as Locomotive Engineers, and with administrative commercial experience. The person appointed will be required to travel extensively, probably spending periods of several months abroad, but with visits home for consultations. He must be accustomed to dealing with matters of policy with, e.g., heads of Government Departments, and to forming appreciations and making reports; also he should be in a post at present or lately carrying not less than £1,000 p.a. Applications giving full details of education, technical training and qualifications, and experience, also stating age and salary required, should be addressed to THE DIRECTOR, L.M.A., 82, Victoria Street, S.W.1.

STANDARD MILITARY RAILWAY BRIDGES.

By F. S. Bond. A description of the different types of bridges designed for rapid erection in the field by the Allied Forces, and of the various methods employed in such erection. 38 pages. 9 in. by 12 in.; fully illustrated. Paper cover 5s. By post 5s. 2d.

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

FOR SALE.—Two used Coal Fuel Briquetting Plants. Makers: Messrs. Yeadon & Co., Leeds. Forms of tender and inspection arrangements from the STORES SUPERINTENDENT, CORAS IOMPAIR EIREANN, Inchicore, Dublin. Closing date for tenders, June 4, 1948.

THE RAILWAY HANDBOOK provides the railway student with a collection of useful statistics and information relating to the railways of Great Britain and Ireland. In addition, in matters of international interest, such as speed and electrification progress, the book extends its scope to cover the whole world in order to present a complete picture of these increasingly-important developments. 120 pp. Dy. 8vo. Paper covers. Price 5s. By post 5s. 3d.

butions will include papers on powder metallurgy, use of non-ferrous alloys for stressed castings, grinding wheels and diamond tools, and derusting. A brochure on the congress, which will be followed by a more detailed programme, may be obtained from the Publications Division, The British Engineers' Association, 32, Victoria Street, London, S.W.1.

Traders' Traffic Conference at Southampton.—On May 11 members of the Traders' Traffic Conference attending their conference at Southampton were entertained by the Southern Region of British Railways in a programme which included a conducted tour of the docks, lunch on the new cross-Channel steamer *Falaise*, and a cruise down Southampton Water in the afternoon. The conference was held under the chairmanship of Mr. H. R. Caulfield-Giles.

Nyasaland Railways Expansion Plans.—It is proposed to increase the borrowing powers of the directors of the Nyasaland Railways Limited from £4,375,000 to £6,000,000 in order to bring the railway up to date and meet the increasing demands of the territories it serves. A programme, which has been put in hand already, of strengthening the line and acquiring new motive power was outlined by the Chairman, Mr. W. M. Codrington, at the annual meeting earlier this year, and reported in our February 13 issue.

The Bergen—Newcastle Service.—The Bergen Steamship Company has restored to the passenger and mail service between Newcastle and Bergen the motorship *Venus* which, when she came out in 1931, had the distinction of being the fastest motorship in the world. She was seized during the war by the Germans and found damaged and sunk in Hamburg. Opportunity has been taken to rebuild the ship on modern lines, and instead of accommodating 201 first class and 78 second class passengers, she now carries 144 first class, 256 second, and 60 "party" class passengers at cheap fares in connection with youth movements and so on. The main engines were undamaged and some small changes have been made to increase the horsepower to bring the speed up to about 20 knots. The *Venus* makes two trips each way weekly between Newcastle and Bergen, connecting with through coaches operating between Kings Cross and the Tyne Commission Quay at Newcastle. The crossing takes about 20 hr. Last week-end the *Venus* made a special trip from Bergen to the Thames and moored in the Pool of London at midday

on Monday. A large party of guests was entertained by Mr. Thos. S. Falck, Jr., Chairman of the Bergen Steamship Company. She sailed again the same evening for Newcastle and resumed her normal sailings on Wednesday.

Surplus Machine Tools Available.—Particulars will be available on the Ministry of Supply stand at the Engineering & Industrial Equipment (Home & Export) Exhibition, which opens at the Royal Horticultural Hall, Vincent Square, London, S.W.1, on May 19, of the very large number of Government surplus machine tools now available to British industry. There will also be shown for the first time various new engineering products, and the organisers of the exhibition, whose address is 17, Henrietta Street, Strand, London, W.C.2, state that almost all the products displayed will be available for immediate or early delivery both to home and overseas buyers. Catalogues at 2s. each, post free, are now available from the organisers.

Visit to United Steel Companies Works.—Last month the United Steel Companies Limited invited professors of engineering from eleven universities to visit their works at Sheffield and Scunthorpe. On arrival they were received by Mr. Gerald Steel, Joint Managing Director, and the visit, which lasted four days, helped to bridge the gap between the industry and the universities by giving the university men a chance of learning more about the special problems of the steel industry and of discussing the latest engineering ideas. A discussion on industrial research was opened by Sir Charles Goodeve, Director of the British Iron & Steel Research Association, and there was also a discussion on the dependence of metallurgical developments on engineering research, with particular reference to the handling of scrap and the flow of gases in open-hearth furnaces.

Waste-Paper Salvage.—The drive for more waste-paper salvage, which was begun last month, by representatives of the national, provincial and periodical press, in co-operation with the Waste Paper Recovery Association, already is showing good results. An approach to business houses in Southampton, for example, has resulted in a 60 per cent. increase in their paper collections. The Dunlop Rubber Co. Ltd. is maintaining its salvage campaign, begun in 1940, and waste paper sold by the Fort Dunlop factory during the first quarter of the year

amounted to 153 tons. Cadbury Bros. Limited, a large user of paper and board, is sending more than 30 tons for repulping each week, and waste paper collected from Courtauld's Limited factories averages five tons a week. Even greater efforts are required, however, if an extra 100,000 tons of paper are to be collected by the end of June.

Southern Region Lecture & Debating Society.—During the summer months, indoor meetings of the British Railways, Southern Region, Lecture & Debating Society are suspended, and consequently a number of outdoor visits has been arranged. Fixtures this year include visits to the ports of Dover and Dunkirk on May 29-30, the Romney, Hythe & Dymchurch Railway on June 19, and the electrical control room, Three Bridges, on July 24. A tour over the course of the Surrey iron railway has been arranged for July 10.

L.M.S.R. (London) Orchestral Society.—At the thirty-ninth concert of the London Midland & Scottish Railway (London) Orchestral Society, held at Friends House, Euston Road, on May 7, the orchestra, leader, J. Grindley, was conducted by Walter E. Chalk. All three soloists, Elizabeth Priestley, Alec John, and Percival Garratt, gave distinguished performances and were recalled to the stage for encores. Considerable skill and sympathy were shown by the orchestra throughout a varied programme, and the interpretation of the symphonic poem "Finlandia," by Sibelius, was the highlight of a series of notable performances.

Half-Rate Motor Licences.—The Minister of Transport asks owners of private cars and motor cycles who will be entitled to licence their vehicles at half the usual rates from June 1 next to apply for their licences as soon as possible after May 1. In accordance with the statement by the Minister of Fuel & Power on April 8, half-rate licences will be issued to motorists who will receive only the standard petrol ration. On and after June 1 they can also be obtained by present holders of supplementary fuel allowances when the period covered by their supplementary allowance expires, or if they choose to surrender the proper proportion of their "E" or "S" coupons to the Regional Petroleum Officer. Applications for half-rate licences must be made in the first instance, preferably by post, to the local taxation office on the usual form R.F.1A, obtainable from any money order post office or local

taxation office. The applicant should write "Standard only" above his signature and send half the duty shown on the back of the form. Half-rate licences are issued for similar periods to full-rate licences.

Visit to Dunkirk.—The Permanent Way Institution, London Section, has made arrangements for a visit to Dunkirk on May 28-29. The party will leave Dover on the 11.10 p.m. boat, May 28, and return by the night boat on May 29.

Locomotives for the National Coal Board and Heavy Industries.—Orders for fourteen 48½-ton "Austerity" saddle-tank locomotives have been received from the National Coal Board and heavy industries by the Hunslet Engine Co. Ltd. During the war 377 of these locomotives were built.

Automatic Ballast Cleaning Machine.—A new Matisa machine is being tried out on British Railways which automatically removes, cleans, and replaces ballast from between and beneath sleepers as it moves along the track. The machine is operated by eight men and moves under its own power. It covers 130 yd. an hour and can dig to a depth of 3 ft. Its length is 18 ft., and it is operated electrically from a 120-h.p. diesel generator set, which also enables it to travel to and from its work at a speed of 20 m.p.h. Tests have shown that the machine can save much manual work and effect substantial economies. A Matisa automatic tamping machine adopted experimentally by the L.N.E.R. last year was described in our August 22, 1947, issue.

British Railways Whitsun Services.—All regions of British Railways are providing augmented services over Whitsun week-end, although some business and workmen's trains will be withdrawn. On the Southern Region full normal services will be supplemented by reliefs to holiday resorts and to race meetings at Hurst Park today and on Saturday, Monday, and Tuesday. On Whit Sunday day excursion tickets will be sold for travel by certain trains from London and some suburban stations to the coast. On Sunday and Monday excursions will run to the coast from certain provincial stations. More additional trains have been scheduled by the Western Region than last year, and some 230 reliefs will be run. The "Cornish Riviera" and the "Torbay" expresses will be duplicated today and tomorrow. A special train will leave Ealing Broadway at 5.25 p.m. today for South Wales and intermediate stations. The London Midland Region will run more than 500 additional main-line trains, of which 88 will be from London. Restaurant cars will be withdrawn from some trains on Monday. On the Eastern and North Eastern Regions a number of trains from London termini will be duplicated. Seats will not be reserved on some trains today. London suburban services will operate normally tomorrow; on Whit Monday some will be withdrawn, but a number of reliefs will be run.

Forthcoming Meetings

May 13-22.—The Society of Model & Experimental Engineers, Exhibition at the Exhibition Pavilion of the Imperial Institute, South Kensington, open from 11 a.m. to 9 p.m.

May 25 (Tues.).—The Institution of Civil Engineers, Great George Street, Westminster, S.W.1, at 5.30 p.m. Annual General Meeting.

Railway Stock Market

There has been a better trend in stock markets following the Russian agreement on talks with the U.S.A., which, it is hoped, will bring about some improvement in international affairs. On the other hand, there was a disposition to await developments in Palestine. Moreover, the pending Labour Party conference made for caution in markets because of fears that resolutions may be passed in favour of further schemes of nationalisation, and that the intention of the Government to introduce towards the end of the year a Bill for nationalisation of steel producers also may be announced.

Re-investment of Argentine rail pay-out money has continued to help British Funds, which recorded further gains, although there were minor fluctuations in the nationalisation stocks. These, however, were again better on balance, with 3 per cent. Transport (1978-88) at 96½. The view is gaining ground that British Gas stock is unlikely to be shorter-dated than 1960-70.

There has been only moderate business in foreign railway stocks, which were generally steadier than of late. There were, however, big adjustments in prices of Uruguay rails following publication of the "share-out" terms for individual stocks of the various companies. In general the terms as a whole were regarded in the market to be as fair and equitable as possible, bearing in mind the rights of debenture stocks, with the interest arrears outstanding in some cases; and the "nuisance value" of ordinary stocks, approval of holders being essential to acceptance of the whole scheme. Outstanding movement was a jump of £57 to £157 in North Western Uruguay 6 per cent. debentures; and a £45 jump in Uruguay Northern 5 per cent. prior lien debentures to £140; while Central Uruguay 4½ per cent. debentures improved £11 to £110. The rises

(not all fully held) were due to the fact that in the case of senior debentures, holders receive not only their "share-out" money, but also interest arrears.

Central Uruguay 5 per cent. second debentures, which receive no arrears, have fallen back to 81, or four points below their repayment value (85). In most cases ordinary stocks have receded slightly below repayment values, due to selling by speculators who purchased at considerably higher levels earlier in the year, when compensation estimates were optimistic.

Continued delay in signing the Anglo-Brazil agreement kept Brazilian rail stocks subdued, but San Paulo rallied to 184 on the company's statement, the market taking the view that confirmation that directors of the company are going to Brazil can be regarded as justifying hopes that payment for the railway will be made before long. There was speculative buying of Leopoldina Terminal debentures, which strengthened to 74. Leopoldina ordinary stock was dull at 14½, while the preference receded to 44½ and the debentures were 79½. Great Western of Brazil shares have been steady at 72s. 6d. In other directions, United of Havana 1906 debentures became firmer at 17½. Nitrate Rails strengthened to 77s. 6d., and Antofagasta ordinary and preference changed hands around 13 and 68 respectively.

Road transport shares have been firm, although less active. British Electric Traction deferred ordinary stock remained at £1,800 following publication of the preliminary statement. Iron and steel shares have remained steady despite the revived belief that the Government may towards the end of the year introduce a Bill for nationalisation of companies engaged in iron and steel production. Locomotive building and engineering shares became firmer, Vulcan Foundry being 27s. 6d., North British Locomotive 25s. 3d., and Beyer, Peacock 24s. 3d.

Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week		No. of Week	Aggregate traffics to date			
				Total this year	Inc. or dec. compared with 1945/46		Total 1947/8	Increase or decrease		
South & Central America	Antofagasta ...	834	2.5.48	£ 46,690	+	£ 3,900	18	£ 933,890	+	£ 247,240
	Bolivar ...	174	Apr., 1948	\$80,579	—	\$28,757	17	\$374,821	—	\$74,827
	Brazil ...	...	...	...	...	...	...	...	...	...
	Cent. Uruguay ...	970	1.5.48	41,749	—	1,406	44	1,574,449	—	83,106
	Costa Rica ...	262	Mar., 1948	25,390	—	7,138	39	292,351	—	39,451
	Dorada ...	70	Feb., 1948	16,700	—	12,900	9	39,800	—	20,500
	G.W. of Brazil ...	1,030	24.4.48	32,000	+	800	17	632,100	+	9,700
	Inter. Ctl. Amer. ...	794	Feb., 1948	\$1,144,611	—	\$ 1,242	9	\$2,402,164	—	\$74,903
	La Guaira ...	224	Apr., 1948	\$115,893	+	\$13,925	18	\$407,532	—	\$49,511
	Leopoldina ...	1,918	1.5.48	49,568	—	16,656	18	960,456	—	174,558
	Midland Uruguay ...	319	Mar., 1948	16,928	—	149	39	162,099	+	11,210
	Nitrate ...	382	30.4.48	13,032	+	1,398	18	99,361	+	28,932
	N.W. of Uruguay ...	113	Mar., 1948	6,536	—	35	39	48,421	—	1,912
	Paraguay Cent. ...	274	30.4.48	£ 62,816	+	£ 12,703	44	£ 2,890,150	+	£ 127,341
	Peru Corp. ...	1,059	Apr., 1948	199,283	+	37,682	39	1,726,563	+	208,348
	Salvador ...	100	Feb., 1948	c309,000	+	c65,000	35	c1,381,600	+	c252,600
San Paulo ...	153	—	—	—	—	—	—	—	—	
Taltal ...	156	Apr., 1948	9,670	+	6,285	44	80,080	+	39,065	
United of Havana ...	1,301	1.5.48	104,636	—	14,213	44	3,310,255	+	398,241	
Uruguay Northern ...	73	Mar., 1948	1,464	+	159	39	10,584	—	743	
Canada	Canadian National ...	23,535	Mar., 1948	9,662,750	+	575,250	14	26,667,500	+	1,598,500
	Canadian Pacific ...	17,037	Mar., 1948	7,086,500	+	348,000	14	19,889,500	+	1,552,500
Various	Barsi Light ...	202	Apr., 1948	30,727	+	1,432	4	30,727	+	1,432
	Beira ...	204	Feb., 1948	111,097	+	20,529	22	580,320	+	134,080
	Egyptian Delta ...	607	31.3.48	20,147	+	1,782	52	628,438	—	44,064
	Gold Coast ...	536	Jan., 1948	214,351	+	12,351	44	1,606,876	—	218,226
	Manila ...	...	...	...	...	...	...	...	...	...
	Mid. of W. Australia ...	277	Feb., 1948	21,855	+	5,112	35	184,383	+	48,562
	Nigeria ...	1,900	Feb., 1948	396,597	+	49,240	48	4,215,199	+	21,726
	Rhodesia ...	2,445	Sept., 1947	643,980	+	102,833	52	6,787,603	+	612,938
	South African ...	13,323	10.4.48	1,345,266	+	225,407	2	1,936,565	+	240,514
	Victoria ...	4,774	Jan., 1948	1,480,357	+	164,562	31	—	—	—

† Receipts are calculated @ 1s. 6d. to the rupee